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TEACHER PERSONNEL

(A summary of references up to November, 1930)

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TEACHER PERSONNEL

(References summarized to November, 1930)

Prepared by the Committee on Teacher Personnel:

RUSSELL L. C. BUTSCH, E. T. PETERSON, and EARL W. ANDERSON, chairman; with the assistance of WARD G. REEDER and R. H. ELIASSEN.

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PREFACE

THE studies which have been made of problems concerning the teacher are largely of the survey type. They serve to lay before us the facts concerning the amount of preparatory training or training in service which teachers enjoy, the method by which teachers are selected, their salaries, tenure, legal status, and so on. Such facts, presented so as to indicate current practices and trends, give opportunity for the evaluation of practices in a given locality by the comparative method. This is the method commonly used for the evaluation of social practices in general. Relatively little attempt has been made to evaluate such practices by a more analytical scientific method. If the analytical method can be worked out and applied it will enable us to make a more fundamental scientific attack on such problems as those concerning the teacher; but in the meantime a comprehensive presentation of current practices is of great service to the individual community by enabling it to compare its practices with general trends. The present issue of the *Review* presents the general facts concerning the teacher and indicates where more detailed facts may be found.

FRANK N. FREEMAN, *Chairman,*
Editorial Board, 1931-32.

INTRODUCTION

LIMITS in the field of teacher personnel are not clearly defined. The authors of this issue tried to avoid undue overlapping with the fields which will be covered in later issues of the *Review*. Overlapping also occurs between the topics of teacher personnel itself. For example, the legal status of the teacher involves questions of pensions, tenure, and salaries. However, overlapping cannot be avoided entirely, since attempts to avoid it may result in omission of certain phases of the study.

Many of the studies of teacher personnel are not research in the strict sense of the word; but in this new field we may be justified in interpreting research broadly to include all factual studies. In some of the fields and in some parts of the fields very little has been written; in others a great mass of material is in print. The extent to which the reviewers have reported earlier studies depends upon the amount of recent material which is available. Hence, the periods covered in the various sections of the report are not uniform. All, however, attempt to cover the studies reported during the past few years.

The organization of topics in this issue follows, in general, the chronological order. First, the need for teachers and the recruitment of teachers are dealt with. Next comes the preparation of teachers and their selection and placement. Then matters relating to the teacher in service, such as salary, teaching load, rating of teachers, professional ethics, the teacher's health, legal status and tenure, and professional organizations. The final topic deals with provisions for pension and retirement.

EARL W. ANDERSON, *Chairman,*
Committee on Teacher Personnel.

CHAPTER I

Teacher Supply and Demand

THE problem and methods of the studies in teacher demand and supply are presented first in this chapter, and afterward the results of the studies are summarized.

Problems and Methods

Most of the studies on supply and demand in teaching have been based upon the records collected in state departments of education (18) (26),¹ colleges, public schools, and college placement offices. A few questionnaire studies were based on replies from appointment offices (5), state superintendents of schools (28), teacher-training institutions (17), and commercial teachers' agencies (25) (44). Most of the studies confined their scope to one state, or to a territory served by a teacher-training institution. Several small questionnaire studies attempted to cover every state or section in the country. The secondary field was studied most often although approximately half of the reports referred to both elementary and secondary fields. Investigations in the college, rural, and administrative areas were seldom reported. A few studies covered only one high-school subject, such as English (2) or commercial studies (31). A review of 119 reports on supply and demand made between 1924 and 1930 has just been made by Eliassen and Anderson (19). An annotated bibliography is included.

Buckingham's (9) very thorough survey of Ohio for the years 1919-24 has served as the example for several subsequent investigations. In this study the terms and procedures are carefully defined and the many variables recognized. Additional state-wide studies have been made in Ohio by Myers (30) for 1925-26, Foster (21) for 1928-29, and Foster (20) and Anderson (1) for 1929-30. These several studies within Ohio permit to some extent the determination of state trends.

Demand has also been gauged by the number of vacancies occurring (10:542) (12:237) (34:4), the number of inexperienced teachers employed (2:399), the number of calls received in appointment bureaus; and the statements of those in charge of public schools, teacher-placement bureaus, and commercial teachers agencies. The extent to which graduates of teacher-training courses obtained positions within or outside of their fields of preparation (16:18) was also a criterion of demand. Some of the studies determined the annual need for new "teachers." Others reported the need for new "trained teachers," usually specifying two and four years of professional training, for elementary and secondary school teaching, respectively.

¹ Numbers in parentheses refer to the bibliography which begins on page 147.

Supply was indicated by the number of graduates from teacher-training courses. Sometimes the number who were teaching at the time they obtained diplomas was subtracted from the supply. Other bases for supply were reports from school officials, appointment offices, and commercial teachers agencies, as to the number registered for positions. Indiana investigators (4:197) counted as "employed" those in other occupations, those teaching elsewhere, and married women. Henderson (24), for California, and Seeder (38:56) for Minnesota, counted as "supply" the teachers granted certificates.

Findings in the studies which followed the Buckingham technic were derived through comparing the supply data with the demand data and making the necessary adjustments in terms of the variables present. In the appointment office field, Grant and Cowley (22:619-20), and Boardman (6:75) set up ratios of opportunity in specific subjects, by comparing the number of calls received with the number of registrants on file. Moritz (29:19-30) presented graphic comparisons of calls and available candidates. Rainey (35:82) compared the number of people in training with those in service. Anderson (1:82) set up indices of opportunity in specific subjects for inexperienced teachers. These are: the percent who taught their major subjects in high school; the percent of all new teachers of specific subjects in Ohio who were neither majors nor minors in these subjects, and the percent of all new teachers who were teaching no classes in their major or minor subjects. Rankin (36:41) compared the estimated percentages of all teachers in the country who were teaching specific subjects with the percentages of graduate students specializing in these fields in two colleges in New York City.

Coxe (14:23) for New York, Klonower (26:61) for Pennsylvania, Smith (39:66-73) for Louisiana, and Trabue (40:13) for New Jersey, made predictions for five to ten years in advance. Noble (32:10-11) estimated the needs for North Carolina by five year periods from 1925-50.

Summary of Findings

In general, the reports indicate an oversupply of trained teachers in many of the high-school fields, and an undersupply in a few. In the elementary field there is an oversupply of teachers, but a definite undersupply of those with two years of college training. The greatest shortage seems to be in the rural schools. The fields most frequently mentioned as oversupplied are: high-school English, history, French, and Spanish. Those fields frequently listed as undersupplied are: elementary, rural, and high-school science, physical education, music, and commercial subjects. Fields reported by investigators as overcrowded follow:

Anderson (1:82)

English, history, Spanish, sociology,
French, social sciences.

Bolton (7:6)

English, history, mathematics, civics,
economics, home economics, sociology.

Whitney (43:49)	Home economics, agriculture, industrial arts, biology, chemistry, sociology, French, music, commercial, economics.
Badger (4:197)	Social science, science, mathematics, home economics, Latin.
Grant and Cowley (22:620)	History, mathematics, English.
Boardman (6:74)	History, French, German.
Williams (45:8)	History, social science, English, Spanish, French.
Moritz (29:19-30)	English, history, Spanish, French, home economics, commerce, music, physical education.
Wilde (44:139)	English, history, Spanish.
Higley (25:24)	English, history, elementary subjects, administration.
Rhodes (37:675-6)	Urban elementary.
Ulrich (41:34)	(College) English, history, administration.
Vance (42:278)	High-school teachers.

Fields reported by investigators as undersupplied are:

Anderson (1:82) (3:13)	Industrial arts, vocational agriculture, certain combinations including home economics, music, commercial subjects.
Bolton (7:6)	Chemistry, industrial arts, physics, music, physical education, biology, Spanish.
Whitney (43:49)	English, history, Spanish, mathematics, Latin, physical education, physics, physiology.
Boardman (6:74)	Industrial arts, English, science, physical education, commercial subjects.
Williams (45:8)	Commercial, science, music, and combinations of English and Latin.
Foster (20:161)	Trained elementary.
Rhodes (37:674)	Rural Teachers.
Wilde (44:140)	Mathematics, science, commercial subjects.
Higley (25:25)	Agricultural, commercial subjects, home economics, industrial arts, music, science.
Vance (42:278)	Elementary field.

Several writers contended that there is no oversupply of competent or superior teachers.

A comparison of the findings of the Ohio studies indicates that the high-school fields in general are becoming increasingly crowded and that the shortage of trained elementary teachers is decreasing. Bossing (8:40) sug-

gests that soon we shall be training one person for each teaching position in the country. The last reported ratio was one to two. The general literature regarding trends indicates that standards are rising. There are some evidences that the annual increase in school population is lessening and that the pupil-teacher ratio is increasing (13:1) (33:202), thus reducing the number of new teachers employed each year.

The oversupply of teachers may be explained as follows: Due to a great increase in the number of college students and college graduates, the hard times and the need for work, together with the ease of securing certificates and the comparatively high beginning salaries, the young people flock into teaching, and the older teachers return to the fold. Increased standards, better salary schedules, and satisfactory retirement systems keep teachers from leaving the profession in large numbers as formerly. Inadequate geographical and subject distribution of teachers tends toward an oversupply and an undersupply in the same field in different sections of the country.

Recommendations

Among the means suggested for improving the situation are: pre-training selection (23:16); higher standards of teacher-training and certification; more careful placement of teachers, continued study of this problem (11:282-3), especially by those in state departments of education; guidance in high school and college, teacher-training entrance examinations of physical, cultural, emotional, moral, and intellectual qualifications; teacher training in some alignment with the needs for new teachers; more careful selection of teachers by school officials; and removal of tenure protection from incompetent teachers.

CHAPTER II

Recruitment for Teacher Training

UNTIL recently teacher-training institutions were more concerned with securing students than in devising methods of selecting the most promising or in eliminating the inferior applicants. The present rather general oversupply in many fields of teaching has so reduced the opportunities for obtaining positions after graduation that many college authorities are considering measures of pre-training selection.

Present Status of Pre-training Selection

A questionnaire study (59:372) of the appointment bureaus of the North Central Association of Colleges and Universities shows that there is very little systematic or scientific classification of students. Questionnaire returns from one hundred colleges and teacher-training institutions (64:123) indicate, according to Ludeman, that most of them favor some plan of selection and elimination. Similarly, Hollis (61:678) found that chance is still the greatest factor leading people to become teachers. In a careful study comparing the intelligence of high-school and college students, Odell (73:22-23) shows that there is a slight advantage in favor of those going to college, and, furthermore, that students attending teachers colleges are the least selective group (73:32).

In 1927 Linton (63:98-9) examined thoroughly the entrance requirements for the B. S. Education degree in 56 teachers colleges, 122 liberal arts colleges, and 44 universities. He found that in each of approximately half of the institutions, one individual passed upon the admission of students. The certificate of graduation from an accredited high school was used by almost all the institutions, either as the only prerequisite for admission or in combination with others. Less than 20 percent of the 222 institutions used achievement tests as a basis for admission. Intelligence tests were used as the sole method of elimination in seven institutions, and in a very few other colleges they were used in combination with other methods. About 50 percent required testimonials as to moral character, while somewhat less than 25 percent demanded evidence of fitness for some service in education, a certificate of good health, and a personal interview.

Teacher-training institutions have been very careless in the matter of selection, according to Linscheid (62:87). However, they are now increasingly emulating the more strict liberal arts colleges and universities.

A few institutions have definitely adopted programs for early identification of satisfactory or unsatisfactory teaching timber. The Philadelphia Normal School requires every candidate for admission to give evidence of high intelligence, health, mastery of subjectmatter, fluency in English, preliminary teaching ability, and certain personal qualities deemed desirable (46:41). Temple University, similarly (58:20), has extensive technics for

pre-training selection. Tests of achievement, intelligence, and physical status are followed by a searching personal interview and a program of continuous guidance. Requirements for admission to any Connecticut teacher-training institution include high-school graduation, superintendent's or principal's recommendation, a certificate of moral character, a rating on a five point scale, a declaration of intention to teach in Connecticut, a physical examination, and a visit to the campus. The day on the college campus is used for tests of mental alertness and achievement, and for a personal interview (71:39). Dearborn (55:21) has described an extensive program of experimentation with methods of selecting prospective teachers for elementary schools in New York State.

Technics of Selection Utilized Most Frequently

Fourteen investigators report concerning the use of intelligence tests in the selection of teachers. Pyle (74:261) states that intelligence tests, although significant for predicting academic success, are practically worthless for predicting success in teaching. Similarly, Whitney (77:60) shows that, within limits, measures of intelligence are almost negligible factors in predicting teaching success. Other investigators hold that intelligence has proved significant. Thus Broom (50:28), Bliss (49:23), Madsen (66:46), and Dearborn (55:21) report findings somewhat favorable to the use of such tests.

Ten studies indicate the importance of physical examinations as prerequisites for teaching. Fenton (57:142) in a questionnaire study of 83 teacher-training institutions reports that physical handicaps are perhaps the outstanding bars to admittance. Whitney (77:60) finds physique more significant in the prediction of teaching success than either intelligence or secondary-school achievement. Dearborn (55:20) holds the physical examination to be of the utmost importance.

Other technics in the order of frequency are achievement tests, guidance programs, character and personality testimonials, personal interviews, aptitude tests, principal's and superintendent's recommendations, interest tests, studies of superior teachers, and the application of trait-indices for leadership.

Morris (70:3) shows that a trait-index of leadership qualities correlated .463 with practice teaching. With respect to aptitude tests, Dearborn (54:68) reports that they are as yet far from perfect, and that much further experimentation will be required to justify their existence. Somers (76:126) found that test results in combination with personality ratings gave a correlation of .74 with success. The selection of a large miscellaneous sampling of superior teachers is recommended by Morgan (69:50) as a basis for recruiting teachers. Another technic was based on studies of why teachers fail (66:44).

Sources for Recruitment

Teachers colleges require graduation from high school as the uniform requirement for admission (75:915). Coffman (52:73) and Anderson (48:154) discovered that more than 50 percent of all teachers in the public schools come from rural communities or small towns. Whitney (78:450) found that a higher percentage of university students than teachers-college students come from rural homes. A study of the social background of 1080 women students in 15 teacher-training institutions shows that the typical member of this group comes from a rural home of moderate means (68:38). A North Central Association Committee (59:355) reports concerning the background of the future teacher as revealed in a Nebraska study. In one New York City training school (65:28) most of the students come from homes where English is not the mother tongue.

Qualities Most Often Desired in Candidates

Adams (47:376) summarizes present requirements under the head of intellectual, physical, personal, and moral qualifications. Linton (63:99) reports that the qualities most often desired are intelligence, moral character, good health, and pleasant personality.

Recommendations and Conclusions

Burk (51:31) recommends closer cooperation between the high school and the teacher-training institutions, and systematic guidance of students, both during the pre-training and the training periods. Other investigators who stress such cooperation and guidance are: Morgan (69:49-50), Hollis (61:683), Mathiasen (67), Fisher (58:20), and Hill (60:179). Farrand (56:596) recommends four criteria in the determination of fitness for college; namely, school records, examinations, scholastic aptitude tests, and personal judgments. Courtis (53:23) stresses six criteria for identifying the desirable students; namely, physical examinations, general culture, emotional stability, intelligence, academic success, and morality. He suggests that candidates who are not eliminated at entrance may be placed on probation for a given period (53:26).

CHAPTER III

The Preparation of Teachers

THIS chapter will summarize the studies of the general and special preparation of teachers in institutions, the state and local requirements for preparation, and the devices for in-service training.

Quantitative Studies of Teacher Training

A short article in *School and Society* for March 18, 1922 (108), reports a study of the Carnegie Foundation for the Advancement of Teaching concerning the preparation of teachers in the various states in 1918. These data indicate that only nine states had no teachers with less than high-school education. Florida had 94 percent of such teachers, Arkansas, 87 percent, and Mississippi, 76 percent. In only six states did 80 percent or more of the teachers have certificates calling for two years or more of normal or college education. In seven states less than 20 percent of the teachers had such qualifications.

In 1921 Burgess (83) gathered data on the training of teachers in fourteen states. In Massachusetts the percentage of teachers who were college or normal graduates increased from 19.4 in 1874-75 to 85.9 in 1920. He also computed a training index for each of fourteen states, representing the average number of years of training beyond high school. These indices vary from 2.054 for Massachusetts to 0.760 for Kansas. The average for the fourteen states was 1.266 years. In a later article Burgess (84) reported that the average index numbers for ten states increased from 0.97 in 1910 to 1.37 in 1920.

In 1927 Robinson (107) gathered data from various sources indicating the training of various types of teachers in eleven states. Out of twenty-three groups of teachers included, only seven were reported with over 50 percent of the teachers having two years of normal school education. Seven groups reported over 90 percent with high-school graduation.

Lauthers (97) in 1926 summarized the findings of a large number of surveys. The average number of years of training of elementary teachers, beyond elementary school, indicated in the surveys of the different periods was: 1912-16, 4.15 years; 1917-20, 5.47 years; 1921-24, 5.72 years. For high-school teachers for the same periods the data were: 6.86 years, 7.55 years; and 7.74 years, respectively. A comparison of city and rural teachers indicates the following: city elementary, 5.56 years; rural elementary, 4.70 years; city high school, 7.59 years; and rural high school, 6.66 years.

Anderson (80:92) in 1924 reported the percentage of normal school and college graduates among the high-school teachers of Wisconsin. The percentages varied from 77 normal, 21 college, in the 2 to 5 teacher schools, to 28 normal, 69 college, in schools of over 15 teachers.

Donovan (90) in 1925 presented some data for the elementary teachers of Kentucky. In the rural schools the median number of years of schooling above the eighth grade was 3.9 for white teachers, and 4.9 for colored. In the city schools the medians were 5.5 for white, and 6.2 for colored.

Hutson (93) in 1927 reported that in California the percentages of high-school teachers who had college degrees varied from 89.4 to 96.1 in schools of different sizes. In Pennsylvania the percentages varied from 52.5 to 86.4.

Smith (109) in 1929 found that in Kentucky 28.7 percent and in Tennessee 24 percent of the high-school teachers did not have degrees.

The Professional Training of Teachers

High-school teachers—Reavis (105) reported that the following professional courses were offered with greatest frequency in thirty teacher-training institutions in 1921-22: educational psychology, 30; principles of education, 29; general administration, 29; methods in special subjects, 28; educational measurements, 27; modern history of education, 25; measurements, mental tests, 24; school health and hygiene, 23. Wilkerson (114) in 1924 found that the following courses were offered with greatest frequency in 72 senior colleges: educational psychology, 57; general psychology, 42; educational measurements, 36; general history of education, 61; principles of secondary education, 36; high-school methods, 33. Whitcraft (112) in 1924 found the following professional courses offered by the percentages indicated in 179 higher institutions in the territory of the North Central Association: administration and supervision, 78.7; educational psychology, 77.0; history of education, 73.1; special methods, 68.1; observation and practice, 63.6; general psychology, 57.0; principles of education, 48.0; educational measurements, 48.0. The following courses were required by the number of institutions indicated: general psychology, 86; educational psychology, 78; observation and practice, 72; general methods, 70; history of education, 67; school administration, 50. In 1925 Edmondson and Webster (91) reported the professional courses most often required by forty-one state universities, as follows: psychology of education, general methods, observation and practice teaching, history of education, principles of secondary education.

Elementary teachers—Phelps (104) in 1923 found that the courses most often required by 47 two-year normal schools were: practice teaching, general psychology, history of education, classroom management, general methods and observation, principles of teaching, educational psychology. For 47 four-year schools the order was: general methods, educational psychology, general psychology, principles of teaching, practice teaching, history of education, observation. Mangum (98) in 1928 found the following professional courses offered most frequently by 101 junior colleges: educational psychology, 77; elementary methods, 34; high-school methods, 33; history of education, 25; methods and management, 24. King (96) in 1929 found the following professional courses most frequently required for intermediate teachers in sixty institutions: school management, 42 percent; introduction to education, 40 percent; principles of teaching, 28 percent; principles of education, 27 percent. Seventy-five percent of the schools required practice teaching, and 19 percent observation. Vance (111) in 1929 found that the general professional subjects prescribed with greatest fre-

quency for upper grade teachers in 1910 were: psychology, 96.4 percent; history of education, 78.2 percent; pedagogy, 61.8 percent; school management, 60.0 percent; general methods, 38.3 percent. In 1928, for junior high-school teachers, the following were found with greatest frequency: educational psychology, 74.0 percent; general psychology, 56.5 percent; tests and measurements, 50.9 percent; educational biology, 45.4 percent; principles of education, 41.7 percent; history of education, 39.8 percent. Practice teaching was required by 87.3 percent in 1910, and by 97.2 percent in 1928; observation was required by 38.2 percent in 1910, and by 58.3 percent in 1928.

Nelson (101) in 1930 reported an analysis of the two-year curriculums in thirty of the larger teacher-training institutions. The curriculums were grouped into kindergarten-primary, intermediate, upper, rural, and consolidated. General psychology, educational psychology, principles of teaching, and general methods are included among the five most frequently required courses in all groups; management and administration in three of the groups. Deyoe (89) in 1930 reported an analysis of the four-year curriculums in 87 state teachers colleges. He classified the curriculums into lower elementary, intermediate, upper elementary, and high school. General psychology, tests and measurements, educational psychology, and history of education are found among the five most frequently required courses for each group; and introduction to education for three of the groups.

The Preparation of Teachers for Special Fields

Davis (88) in 1922 found that out of approximately 15,000 teachers in the high schools accredited by the North Central Association, 57.2 percent were teaching entirely the work for which they were prepared; 37.8 percent were teaching such subjects only in part; and 5 percent were teaching subjects for which they had made no specific preparation. Rhodes (106) in 1929 found that the following percentages of teachers specially prepared for certain fields were actually teaching in those fields: primary, 48 percent; intermediate, 41.7 percent; rural, 73 percent; junior high school, 20.7 percent. Hutson (93:45-46) in 1927 reported on the number of semester hours of preparation in higher institutions in the special field taught, of high-school teachers in Minnesota, California, and Pennsylvania. The best prepared groups in Minnesota were: agriculture, 74.5 hours; home economics, 40.8 hours; general science, 40.5 hours; Latin, 32.0 hours; English, 25.2 hours; French, 22.0 hours. In Minnesota they were: agriculture, 60.0 hours; general science, 51.0 hours; Latin, 32.0 hours; music, 30.5 hours; home economics, 30.0 hours; Spanish, 28.0 hours. In Pennsylvania they were: agriculture, 55.5 hours; home economics, 47.0 hours; general science, 34.3 hours; Latin, 28.2 hours; English, 24.0 hours; French, 24.0 hours.

State Requirements Regarding Preparation of Teachers

Elementary teachers—Cook (87) in 1927 summarized all of the certification laws of all of the states. Her table presenting data on the scholarship

requirements for the lowest grade of certificates for 1921 and 1926 indicates that in 1921 thirty states, and in 1926 only 15 states, had no definite scholarship requirement. In 1921 only four states required any work beyond high school (in each case less than one year), while in 1926 four states required two years beyond high school, and 23 states required some work beyond that level.

Secondary-school teachers—Brownell (82) in 1926 found that the number of hours of educational courses required of high-school teachers varied from "no definite requirements," in one state, to 25 semester hours in one state. Eight states required 12 hours; 10 states, 15 hours; 17 states, 18 hours or more. Hutson (93:157) in 1927 found that one state required one year of graduate work for a first grade high-school certificate; 37, graduation from college; five, two years of college work; two, two years of normal school; one, one year of college; and seven states granted the certificate on examination. Stoutemyer (110) in 1929 reported that 31 states issue the lowest grade of secondary certificate on the basis of training as follows: four years college, 12 states; three to three and one-half years, five states; two to two and a half years, 13 states; one year of professional work, one state. The amount of professional work required for secondary certificates varied from 3 to 24 semester hours; one-third of the states required 18 hours, and two-thirds required 15 hours or more.

Training Requirements Set Up by Cities

The National Education Association (100) in 1928 gathered data from 1,532 cities of over 2,500 population concerning the training requirements they have set up in employing teachers. For elementary teachers, 7.0 percent of the cities required one year beyond high school; 77.6 percent, two years; and 10.2 percent, three years. For junior high-school teachers, 30.7 percent required two years; 19.7 percent, three years; 23.4 percent, four years. For senior high-school teachers, 80.4 percent required four years, and no different requirement was set up by over 5 percent of the cities.

Provision for Preparation of Teachers

Myers (99) determined the number of state institutions devoted entirely, or in part, to the training of teachers, per million of population, for each of the states of the Union. He found at the top of the list: New Mexico, with 13.88 per million; Nevada, with 12.92; North Dakota, with 10.82; South Dakota, with 9.43. At the other end of the list were found: Illinois, with 0.93; Ohio, with 1.04; New York, with 1.06; Arkansas, with 1.14; and Iowa, with 1.25. The ratio for the entire country was 2.50 institutions per million of population.

Determination of the Professional Content of Teacher-Training Curriculums

Opinions of teachers as to the relative value of professional courses—Kelly (95) in 1920 asked over 1600 teachers and administrators in Kansas to evaluate certain courses in education. Educational psychology, school

organization and administration, and psychology of high-school subjects were ranked high in value; high-school administration, moderately high; and the historical courses low in value. Davis (88) in 1922 reported on the responses of over 11,000 teachers in the high schools accredited by the North Central Association as to their estimates of the value of professional courses. Psychological courses and methods courses were ranked high; sociological, administrative and philosophical courses moderately high; and historical courses, vocational and industrial, and tests and measurements, low in value. O'Brien (102) in 1925 reported that the replies of 114 former students of the University of Kansas on the value of courses in education arranged the courses in the following order: educational psychology, educational measurements, educational sociology, school administration, history of education. Clem and McLaughlin (86) report the opinions of high-school principals as to the courses of most use; high-school administration, educational psychology, and methods are at the top of the list. Peik (103) in 1929 obtained evaluations from 100 alumni of the University of Minnesota of the prescribed courses in education. The courses were found to be arranged in the following order: special methods and practice teaching, educational psychology, technic of high-school instruction, educational sociology, the high school, history of education.

Effects of specific courses on teaching efficiency—Jacobs (94) in 1928 reported a study of the effect on teaching efficiency of the subjects taken in normal school. He found that the better teachers had taken more courses in the following subjects: manual training, constitution, practice teaching, general methods, gymnasium, primary education, home economics, and biology. The poorer teachers had taken more of the following: agriculture, drawing, history of education, political science, sociology, music, educational psychology, and hygiene.

Teaching activities as a basis for the professional curriculum—The Commonwealth Teacher-Training Study (85) collected teacher traits and teacher activities from every possible source. A total of 11,960 different activity statements was found. These were classified into the following divisions: (I) Teachers' activities involved in classroom instruction, (II) School and class management, (III) Supervision of pupils' extra-classroom activities, (IV) Relationships with the personnel of the school staff, (V) Relations with members of school community, (VI) Professional and personal advancement, and (VII) School plant and supplies. A checklist was constructed containing 1001 divisions, subdivisions, sections, and subsections. This was used to obtain judgments from and concerning teachers in various groups—senior high-school, junior high-school, kindergarten-primary, etc.—as to frequency of performance, difficulty, importance, and desirability of preservice training, of each of the activities. It is proposed that the training course for any given group of teachers could be so constructed as to include as many activities as possible, beginning with those with the highest scores on the four criteria.

Training of Teachers in Service

Devices used in local school systems—Whitney (113:153-59) reports the methods of teacher improvement used in cities of various sizes. In a group of 34 communities, varying from two to 102 teachers, the following methods were found with greatest frequency: personal conference, reading educational literature, visitation by superior officers, regular general teachers' meetings, group conferences on specific problems, and visiting other teachers. For 71 cities, varying in population from 5,000 to 1,824,000, the following technics were found with greatest frequency: Pension or retirement plan, visitation by superior officer, personal conference, group conferences on specific problems, supervision by general or special supervisors, additional salary for merit, and extension or correspondence courses.

Ayer (81) reports a very interesting table of the administrative duties pertaining to professional improvement of teachers as actually performed by administrative officers. The most important items, in order, are: suggest professional books, suggest current articles, arrange attendance at institute, encourage teachers to experiment, provide professional magazines, enroll teachers in organization, recommend professional courses, rate teachers, advise on team-work qualities, and organize professional library.

Institutional responsibilities for in-service training—Whitney (113:102-104) reports the replies received from 138 state normal schools and teachers colleges, relative to the plans used for continuation of training after their graduates entered teaching service. The items with the greatest frequencies are the following: extension courses, correspondence courses, full-time field workers, irregular faculty visitation, and success reports from superintendents.

Opinions of teachers on methods of improving in service—Davis (88) reports the vote of teachers in the high schools of the North Central Association on methods of improvement in service. The most popular were: summer school, sufficient salary to take advantage of opportunities, private reading, lightening teacher load, travel, visiting days, better supervision, and teachers' meetings. Gray (92) reported that the methods of improving the technic of teaching mentioned most frequently by 200 elementary teachers were: professional library in school or city library; professional reading centered about specific problems; mimeographed letters or bulletins; teachers' meetings, cooperative work among teachers and supervisors; adequate equipment; and use of tests in instruction. Almack (79) reported that the means of improvement most frequently mentioned by 188 rural teachers were: general reading, institutes, summer school, re-employment, increase in salary, cooperation and appreciation of community, correspondence study, and suggestions of supervisors.

Data concerning certain technics of in-service training—Davis (88) reports that out of over thirteen thousand teachers in the high schools of the North Central Association, 43.7 percent had attended college or university, summer session or other courses, within one year; an additional 26.5 percent within three years; 13.3 percent within five years; 10 percent within

the past ten years; and only 3.6 percent had not attended any university course since graduation.

A table in the *Research Bulletin* of the National Education Association for September, 1928, (100) indicates that in 1928 the summer school enrolment was 31.32 percent of the total number of teachers. The percent the total number in summer school was of the total number of teachers in each state is: Oklahoma, 63.06 percent; Colorado, 57.97 percent; Alabama, 55.16 percent; Tennessee, 51.56 percent; New Jersey, 5.37 percent; Connecticut, 7.43 percent; Montana, 10.50 percent; Massachusetts, 10.75 percent. The same *Bulletin* presented data which showed that considerably more than a majority of the 1,532 cities reporting, rewarded teachers for attending summer school or for taking courses during the school year. In general these rewards were in the form of salary increases, although an appreciable number gave some direct financial reward.

Summary

The material presented in this chapter may be summarized as follows. The percentage of elementary teachers in the United States who have completed two years of normal school and the percentage of high-school teachers who have completed four years of college, are still relatively low. A large number of teachers have not completed high school. The percentages at these various training levels vary greatly between different states, school systems of different sizes, and different classes of teachers. There is some evidence that the general level of training is improving. Studies of the professional courses offered for, and required of, teachers indicate that there is little agreement on the courses best suited for the preparation of teachers. Psychological courses usually stand very high on such lists; history of education is becoming less popular; practice teaching appears to be coming into more prominence. Many teachers specifically trained for special fields are not teaching in those fields. Many high-school teachers are without adequate preparation in the subject taught. The standards set by the state certification laws are becoming higher, although still low. Among cities the general requirement for elementary teachers is two years beyond high school, and for senior high-school teachers, four years. There is still much disagreement on the requirements for junior high-school teachers. The provisions for teacher training by public institutions vary tremendously between states. Teachers do not agree very well on the value of various courses, although psychological courses appear to rate high. A comprehensive study of teacher activities appears to give an objective basis for the determination of the content of professional courses. The responsibility for training teachers in service has been recognized by most cities, and by a few training institutions. The particular technics used vary greatly among the different types of school systems, and compilations of consensus of opinion as to the value of the technics do not agree very closely. Apparently many teachers are taking advantage of summer or extension courses, and are encouraged to do so by salary increases and other rewards.

CHAPTER IV

Teacher Selection and Placement

STUDIES on the responsibility for selection, the technics in selection, the qualities in teaching success, the function of placement offices, and the adjustment of teachers to the position are summarized in this chapter.

Responsibility for Selection

Ballou (122:58), in a survey of 70 cities in 1915, found that practically all superintendents participated in the appointment of teachers. Usually they nominated the teachers, subject to the approval of boards of education. Similar findings are reported by Almack and Long (117:40), Reeder (158:57), Andersen (119:42), Adams (115:88). Several investigators stress the responsibility of the state for the best selection and placement of teachers (117:51) (142:447) (147:250).

Technics in Selection and Placement of Teachers

A review of the technics reported, and a study of their reliability, reveal that the problem of predicting teaching success for the purposes of selection, and the problem of judging the results of teaching, on which selection is dependent, are far from solved (164:74).

Perhaps the most hopeful technics are objective tests of various types. New York State is experimenting with an extensive testing program, including tests of health, interest, intelligence, English and reading, achievement, and professional information (129:20). An extensive testing program is also reported in Philadelphia (132:20), and is recommended by other investigators (118:89) (144:37) (149:46). Hunt (139:339) shows that aptitude tests tend to have higher predictive possibilities than intelligence tests. The intelligence test alone does not as yet have sufficient validity for the prediction of teaching success, although there is evidence of its having some usefulness (138:54) (137:238) (159:134) (134:277) (164:74) (166:591) (160:642) (170:60) (157:261). Studies are needed in determining more accurately the relationship between intelligence and success in teaching (160:644). Another technic which is very commonly employed is the photograph. Investigators have found, however, that the method is little better than pure guess work, (140) (141:61) (145:49).

The personal interview, if properly conducted, is considered one of the more reliable technics (162:65) (115:88) (126:48) (163:49) (146:138) (132:20). Tiegs feels, however, that the personal interview will not succeed as a highly reliable technic, because it is based too largely upon the personal equipment of the teacher, and not sufficiently upon the context in which this equipment will function (164:79).

Rather extensive studies have been made of the information requested through the application blanks. These investigations all reveal a tremendous variation in the quality and quantity of facts desired, with little con-

sideration of their validity in the prognosis of teaching success (154:56) (116:31) (168:373) (167:176) (133:51).

Two investigators report on the value of the college credentials, and their findings are exactly the opposite. Myers (153:601), for instance, reports that the composite rating at the college has a low correlation with superintendents' ratings, unless they are weighted. Greene (138:54), on the other hand, shows a correlation of .79 between the ratings of 390 professors and 103 superintendents.

Other technics mentioned are the written examination, which needs to be more scientifically constructed to be reliable (156:222), the trait index of leadership, which is somewhat significant (151:3), and the graphic rating which Tieg believes to be the most promising technic of all (164:75). Reeder (158:63) stresses the importance of early teacher selection in order to obtain the very best teacher for a given position. Almack and Lang (117:55) recommend that administrators seek teachers of merit who may not have applied for positions.

Qualities Influencing Teaching Success

Great variation exists in qualifications desired in teachers, but there is a definite tendency to standardize the traits (127:71). Minimum training requirements (156:213) are becoming increasingly necessary and prevalent. Tubbs (165:326) in surveying the field found that teachers should be selected on the basis of education, experience, health, character, and personality. In a Kansas survey, 531 superintendents selected character, personality, training, and experience, in the order named, as the important traits for the teacher (123:65). Knight (143:IX), after a thorough investigation of the traits most highly related to teaching success, came to the conclusion that the general factor of interest in one's work is the dominant factor in determining one's success in teaching. Superintendents in Alabama and neighboring states chose the following six most significant factors out of a list of 14 factors in teacher selection: teaching ability, professional knowledge, discipline, general culture, cooperation, and personal appearance (124:7). Ballou (122:179), in his survey of 70 cities, found that the eligibility of candidates should depend upon age, academic education, professional training, teaching experience, health, and moral character. Complete lists of the characteristics of good teachers are given by Lewis (146:129).

Intelligence, although a factor, is not nearly as important a quality as one would think. Perhaps, if teaching ability were better understood, intelligence would have higher validity (159:134). At present it seems that temperament, executive ability, social qualities, and the like, have a higher prognostic value than intelligence. But more accurate tests for the determination of those qualities need to be developed (137:238). Dozier (130:332) after analyzing 1132 recommendations, reports that social qualities are stressed more often than either professional or personal qualities. In a similar study Wang (168:369) shows that character was most frequently mentioned. Whitney finds (170:62) that the characteristic "personality" means

something with reference to teaching skill, correlating .524 with general merit in teaching.

The Function of the Placement Office

The efficient placement office is able to render valuable service to the profession by aiding both the employer and the employee. There is need for a personal touch in the selection of teachers, and in this the teacher-placement bureaus can be of great help (165:331). Madsen (149:89) reports that the college appointment bureau is the most important source of teacher supply. According to Brogan, to render the best service, standards and principles should be set up and prepared by those whom the placement bureau serves (125:94). There is still too much lack of uniformity in the functioning of bureaus of appointment (171:190); and one writer believes they are not sufficiently stressing the information that superintendents want (131). Mathiasen (150) and Frazier (135:32) recommend that college placement bureaus take more of an active responsibility for their graduates, and Frazier (135:20) holds that successful placement must be preceded by a thorough analysis of the student's abilities.

To facilitate the work of the placement office, the school administrators should submit full descriptions of the positions for which teachers are desired (146:119) (148:278). In the appraisal of candidates, more scientific methods are advised, and continuous guidance throughout their college career is recommended (125:84) (128:67). Myers (153:597) reports that the appraisal of candidates at Ohio University showed a low correlation with superintendents' ratings. He believes that, as superintendents and professors become more expert in rating teachers, the correlation will be higher.

In order to determine the effectiveness of placement, systematic "follow-ups" are essential in order to give data with respect to the nature of the positions held (120:207) (171:188) (155:3) (161).

Judd (142:447), and McCarroll and McCloud (147:250) advocate state participation in the placement of teachers.

Adjusting the Teachers to the Position

Selection is never completed until the teacher is actually appointed, given a contract, assigned a position, located in a suitable home, and introduced to her work and her immediate associates (146:145). Systematic and friendly follow-up of the problems of new teachers and the maintenance of counselors or sponsors is further recommended (146:52). Lewis further stresses the importance of the "teacher-in-her-work unit" (146:21). This unit involves consideration of a teacher's capacities, interests, and the opportunities presented by the work. Whitney (169:40) stresses the importance of analyzing a person's capabilities for proper placement, as is now commonly done in industry. Other investigators show evidence of careless placement within school systems (121:207) (152:76) (136:374). Not only is careful placement in a school system important but the legal status of the teacher should be such that she will be able to render the most efficient service for the good of the pupils (120:151).

CHAPTER V

Teachers' Salaries

TEACHERS' salaries have always been a question of major importance to the administrator, the school board, and the community.

Research in teachers' salaries has taken two directions:

- a. Finding out and reporting the prevailing situation.
- b. Research to improve schedule making.

The main technic used has been that of the questionnaire in combination with a critical analysis of data upon income, wages, and salaries, and living costs compiled either in local or nation-wide economic studies.

In the past, teachers' salaries have been largely gauged by custom and sentiment. Since Evenden's study (183) in 1919, which was an analysis of the salary situation in the United States in 1918, there has been a growing tendency to approach the problem from its economic and social aspects. Evenden sent questionnaires to 423 city superintendents; 392 replies yielded information on the distribution of salaries, salary schedules, current standards, and cost of living. Replies from at least 7,500 individual teachers were utilized in the study. Thirty-seven state commissioners or superintendents of public instruction also supplied data. Comparisons were made between the median salaries of school teachers and the median salaries of professional groups, railway workers, construction workers, and unskilled workers. The major conclusions of the study were that:

- a. Salaries of elementary teachers are too low, even in cities, for efficient work and proper living conditions for an individual teacher.
- b. There are wide variations in salaries between cities and between geographical sections. There are even wider variations within any one group than between groups.
- c. Median salaries improved over 1918, but the cost of living outran the increase in salaries.
- d. The median increase in salary for elementary teachers was \$74.00 for the year.
- e. Cities pay the highest minimal and maximal salaries.

In the discussion of salary schedules a series of the elements to be considered in making salary schedules were developed and discussed. A set of standards was proposed. The most important study prior to Evenden's was made by Boykin and King (175). They made a study of the salaries paid all administrators, supervisors, and teachers in cities of 5,000 and over in the United States in 1912-1913. The data are not given statistical treatment. Actual salaries, under various classifications, as, "supervisors in cities of 5,000-10,000," and others, are printed. This study contains a complete bibliography on teachers' salaries to 1914.

In 1920, Burgess (176) studied the general trend of teachers' salaries since 1841. He used index numbers computed by securing average salary figures from a selected and unchanging list of communities over a period of

eighty years and averaging the figures from these same communities for each year. He used index numbers for salaries of men, and of women teachers in rural and in city schools. His conclusions were that: in similar communities men have been paid considerably more than women teachers; city teachers have been paid more than country teachers, regardless of sex; the salaries of women teachers have been gaining on those of men teachers; and those of rural teachers on those of city teachers. Women rural teachers have had the largest percentage increase in salary, almost 800 percent, and city men teachers the smallest, 200 percent, but city men teachers, at the beginning of the period studied, 1841, had salaries more than five times as large as women country teachers. Between 1915-1920 teachers' salaries increased forty-five percent, with city teachers showing the largest gains.

In 1922, Ballou (174) reported an analysis of salary schedules prevailing, in 1920-21, in 28 cities having a population in excess of 200,000 and 20 cities having a population of from 100,000 to 200,000. Comparisons are made between cities of (a) minimum, (b) annual increase, and (c) maximum salaries paid to all classes of school employees. All of the cities are ranked. New York ranks number one in most of the categories.

The most active agency in the reporting of the status of salaries has been the Research Division of the National Education Association. Since 1923, biennial studies, on a comparable basis have been published arraying salaries by type of position, geographical areas, and size of city (203 to 207). Several issues of the *Research Bulletin* of the National Education Association have also included summaries of trends and developments in salary schedules. Supplementary analyses of salaries of special groups, administrators and supervisors in particular, have been made available to subscribers to the special research service. In addition to completeness and comparability, these studies have the additional advantage of sufficient recency to be of invaluable administrative use to school executives.

Rogers (211) in 1923, charted the trend of teachers' salaries in Iowa. His findings were: (a) that the salary of the average Iowa superintendent of schools increased 131 percent between 1913-14 and 1921-22; the money increased from \$1,014 to \$2,344; (b) the salary of the average principal increased from \$822 in 1913-14 to \$1,559 in 1921-22, a gain of 90 percent; (c) the salary of the average Iowa high-school teacher increased from \$676 in 1913-14 to \$1,437 in 1921-22, an increase of 112 percent; (d) the salary of the average Iowa grade teacher increased from \$612 in 1917-18 (no data on previous years) to \$1,058 in 1921-22, a gain of 73 percent for the five-year period; and (e) the salaries for 1921-22 are the highest reached. In 1922-23 the salaries of superintendents were off one percent, high-school principals down three percent, and high-school teachers down four percent from the peak. In 1925, the Michigan State Teachers' Association (198) collected on rural teachers' salaries in Michigan for the school year 1923-24.

Cotterman (180) reported the salaries of 788 rural high-school superintendents in Ohio. The term meant the executive head of a first-grade rural

high school. Salaries ranged from \$1,200 to \$4,600 per year. The median was \$2,038 and the mean, \$2,142. Eighty-six and six-tenths percent of these men were college graduates, thirteen and four-tenths percent were not college graduates. The college graduates received salaries averaging \$236 more than the non-graduates. Increasing experience is regarded up to about the twenty-fifth year of service. The median experience is 10.3 years. Hupp and Heck (190) investigated in detail the salaries paid in fourteen Ohio cities of from 20,000 to 40,000 population. They made recommendations for adoption of definite salary schedules recognizing service and training and increases in elementary school salaries. Kidd and Clem (191) surveyed the salaries of superintendents and mayors in cities of 100,000 population and over. They found that the salary range for mayors in 82 cities was \$1,500 to \$25,000, for superintendents for the same cities \$4,000 to \$15,000. Sixty-six percent of the superintendents receive more salary than the mayor; 12 percent receive the same salary, 22 percent less salary.

McGaughy and others (194) examined the New York City situation by means of five separate studies. (a) A comparison of the purchasing power of the 1926 salaries of different groups of teachers in New York City with the purchasing power of the salaries of the groups of teachers in 1910 and in 1900. The conclusions reached were that the 1925 dollar was worth only 49.6 cents as compared with the 1910 dollar and 37 cents as compared with the 1900 dollar. (b) A comparison of the increase in teachers' salaries in New York City over a given period with the increases in wages and salaries received by other employed groups during the same length of time showed that the purchasing power of the New York City teachers' salaries is below that of certain wage earners and salary groups reported in the "Index" of Carl Snyder in 1926. (c) A comparison of salaries with other large American cities. These data were used chiefly to study the relationships between the salaries of two given groups of teachers in these cities and in New York

TABLE 1—TRAINING OF NEW YORK CITY TEACHERS

Sex	Number Reporting	Average Number of Years of Training				Percent Having More Than Four Years Training Beyond High School Graduation
		Beyond High School Graduation	In Teacher Training Institutions	College or University Under-Graduate	College or University Post-Graduate	
1	2	3	4	5	6	7
All women.....	8,540	3.0	2.0	1.6	0.0	33
All men.....	2,505	4.9	0.0	4.0	0.6	68

City. For example, the average salary of elementary principals was found to be almost exactly twice that of the average salary of women elementary teachers. This relationship was used as a guide in recommending a schedule for the elementary principals of New York City (d) The professional and economic status of New York City teachers. This study was based upon a questionnaire. Eleven thousand eighty one reports were filled out by individual teachers and returned to the committee. Some of the results of study (d) are summarized briefly in Tables 1 and 2.

For purposes of studying the economic condition, the teachers were divided into six groups; unmarried women living at home, unmarried women living away from home, and married women. The same grouping was used for the men: (e) a minor study was carried on to determine the attractiveness of New York City to outside teachers. The committee assumed that the expense of food and housing should not be less than 55 percent of a teacher's total cost of living. In the senior high school, married men with one child were chosen as the basic group to which was adjusted all high school salaries. In the elementary school, the salaries were adjusted to the living expenses of single women living away from home. A feature of the schedule is the so-called "super maximum," included to reward "professional training" over and above the requirements for a teaching license. This study pioneered in the field of utilizing a citizens' committee, or some other disinterested agency to investigate salary problems.

In 1928, the U. S. Office of Education (218) reported the minimum and maximum salaries of teachers, together with the number of annual increases necessary to reach the maximum salary, for cities having a population of 100,000 or more. Salary scales in city school systems in 1928-29, are reported (205) by the National Education Association's Research Division. In 1929, Holy and Green (187) studied the trends of salary schedules in 58 Ohio cities, ranging from Bedford with 3,000 population to Cleveland with a million population. The schedules were classified according to size of city and tabulated so as to show, for the years 1923 and 1928, minimum and maximum salaries, the number of years required to reach the maximum, and the amount of increase allowed each year. The conclusions of this study were: (a) that median salaries of the schools of Ohio have increased during the past five years in both elementary and high school positions. These increases

TABLE 2—TEACHING EXPERIENCE OF NEW YORK CITY TEACHERS

Sex	Average Years of Teaching Experience		
	Kindergarten-6B	Junior H. S.	Senior H. S.
1	2	3	4
Women.....	9.7	19.1	16.0
Men.....	4.3	9.3	13.7

range from 5.6 percent to 12.7 percent. (b) The median number of years required to reach the maximum salary has shifted but little in the last five years. There is a general tendency for the median to approximate ten years. A composite schedule would be as follows: elementary teachers start at \$962 and increase approximately \$60 each year for nine years until a maximum of \$1,512 is reached. The high-school teacher starts with a salary of \$1,340 and increases approximately \$85 each year for about ten years, reaching a maximum of \$2,208. The index of the cost of living for June, 1928, was 161.5 as compared with an average of 161.3 for 1923. It is evident that there is no difference in the dollar value for the years 1923 and 1928. The gains registered were gains in "real wages."

Certain studies report technics used in determining salary schedules. Moehlman (199) developed an index which could be used as a convenient and effective base upon which salary schedules might be built. He suggested that the reward to unskilled labor be used as the base, 100. Teachers are then to be paid at rates ranging from 150 to 300, depending upon preparation. Huggett (189) described a technic for developing a schedule for Orion, Michigan. His technic was a questionnaire sent to all towns of comparable size and characteristics. "Best practice" was the guide in setting up the schedule arrived at. Rossman (213) compared the clerks' salary schedule of Gary, Indiana, with the teachers' salary schedule and showed that a teacher must expect to put in sixteen years in preparation and teaching after high-school graduation in order to make a four-year college course pay, as an investment.

Baer (173) made an extensive study in Ohio to determine, "For What Is the Teacher Paid?" He reported a close relationship between salary and experience. There was a relatively low correlation between salary and training.

A significant development since 1918 has been the "single salary schedule." Hosic (188) reported, in 1926, a critical survey of the single salary schedule in practice. Upon the basis of replies from ninety cities that used the single salary schedule he summarized as follows: the minimum salary is usually paid to graduates of a two-year normal school course without experience in teaching; the maximum salary is reserved for persons who have obtained a master's degree, or its equivalent, and who have had ten years of successful experience. The factors that appear to be taken into account in determining the salary of a given teacher at a given time include: (a) academic and professional training; (b) length of service; (c) degree of merit; (d) sex (in several cases). The differential between the salary of the graduate of a two-year normal school course and the graduate of a full four-year course is too small. It averages only about \$225. Rating schemes now in use will prove unequal to the strain which the operation of the new schedule (single salary schedule) will put upon them. They should be better adapted to individual cases; they should put more stress on results achieved and less on traits of personality believed to be favorable to good teaching; and—they should be worked out and applied cooperatively. Lastly, the single

salary schedule will in time be applied to principals. Studebaker (181) describes the Des Moines schedule and presents data showing that the effect of the schedule is to improve teachers in service. Smith (214) reported that the effects of a single salary schedule in Lawrence, Kansas, were satisfactory. Thompson (216) reported a status study of the single salary schedule; ninety cities had single salary schedules in 1925. The Research Division of the National Education Association (206) presents the principles of the single salary schedule, and gives basic economic data that should receive consideration in building a schedule.

Morris, L. L. (200) has made the most recent analysis and evaluation of the single salary schedule, to determine its effect upon the training of teachers, the influence of the factors of experience and merit, the financial question, and the administrative practice in cities using the single salary schedule. The evidence was gathered from the United States Office of Education documents, the material collected by the Research Division of the National Education Association, and from questionnaires sent out to selected cities. Thirty-five single salary schedule cities are compared in the report of the study.

The conclusions of the study are, that teachers in single salary cities are somewhat better trained than are those of the regular salary cities; only 75 percent of the superintendents reporting exercise any control over the training of their teachers in service. The single salary schedule has not proved as bad as its opponents have feared; neither has it proved as effective as its friends have insisted.

McGaughy (193), in the *Teachers' College Record*, reviews the work done in New York, Pittsburgh, and San Francisco and gives as his judgment that the major obstacle to scientific schedule making is mandatory legislation requiring equal pay for men and women, and the sentimental acceptance by the teachers themselves that this is sound both economically and professionally. Hart and Peterson (185, 186) report that the contribution of the San Francisco schedule is that it will operate to make teachers stay in teaching as a professional career. The Pittsburgh salary schedule was built up as the work of a citizens' committee (209).

Carr (177) reports recent laws that affect teachers directly. His report contains a section on salaries, showing that states confine themselves largely to questions of minimum salaries.

Arnett (172) and Frasier and Whitney (184) report salaries and studies of living costs in certain colleges and universities.

Bibliographies have been compiled by Baldwin and Mohr reported in Boykin and King (175); Nelson (208), which cover the field of teachers' salaries to 1890; The Library Division, Office of Education (217); and the *Research Bulletin* of the National Education Association (206). A classified bibliography by Carr appears in the *Sierra Educational News* (178).

CHAPTER VI

Teaching Load

TEACHING load may be expressed in the number of pupils per teacher. The U. S. Office of Education, in its annual report for 1917-18, reported the average teaching load in all city schools for the year as 35.6. This figure was derived by dividing the total number of pupils by the total number of teachers. Thirty-nine percent of the schools reported a per teacher load varying from 31 to 36 pupils.

In 1918, Bliss (224) reported the average teaching load for elementary teachers in 22 cities, all with more than 100,000 population, as 32.4 pupils. For high-school teachers in the same cities, the median was twenty. He reports a study from Topeka, Kansas, that gave the following "safety zone in numbers" for subjects in the high school: music, 42-88, physical training 28-55, English 20-24, mathematics 18-24, history 17-23, science 16-22, commercial subjects 15-23, drawing 14-24, modern languages 15-20, Latin 14-19, household arts 13-23, manual training 12-18. How these standards were derived is not given. Babson (222) reported the standards followed by principals in prescribing the teaching load in Los Angeles, California. The standards for three and four-year high schools are given in Table 3.

TABLE 3—TEACHER LOAD STANDARDS IN LOS ANGELES HIGH SCHOOLS

Subject	Periods per week of teaching	Range of teacher load per day
1	2	3
English.....	25	125 to 160 pupils
Laboratory science.....	28-30	100 to 130 pupils
Shop.....	40	60 to 80 pupils
Home economics.....	30-40	60 to 120 pupils
Mechanical drawing.....	40	No range suggested
Music.....	25-30	No range suggested
Commercial.....	25-30	125 to 225 pupils
Art 2.....	30-40	No range suggested
Regular academic subjects as Hist., Math, etc.....	25	125 to 175 pupils
Physical education.....	30	250 to 300 pupils

The standards for six-year high schools are so nearly the same as for the three and four-year high schools that they will not be given here. Tables 3 and 4 report standards which are used by principals as guides rather than absolute rules for teachers' assignments.

In 1927, Diamond (228) reported a study of teachers of industrial arts and industrial education in Michigan. The median clock hours taught per week in cities below 5,000 was 25.5; cities above 5,000 in population, but

TABLE 4—TEACHING LOAD FOR DEPARTMENT HEADS IN LOS ANGELES
HIGH SCHOOLS

Basis	Periods per week of teaching	Range of head load per day
1	2	3
3- 7 teachers.....	4 or 5 classes	Student load to depend on size of school, character of department, and outside demands.
8-14 teachers.....	3 or 4 classes	
15 or more teachers.....	2 or 3 classes	

less than 75,000, 27.5; those over 100,000, 23.6. The median for all cities was 25.7 clock hours per week. In the smallest cities the middle fifty percent of the teachers have between 17 and 27 pupils in their largest classes, and between 7 and 12 pupils in their smallest classes. The middle fifty percent of the teachers in the middle sized cities have between 20 and 28 pupils in their largest classes and from 8 to 15 in their smallest. In the cities over 150,000 population, eleven teachers have 50 or more pupils in their largest classes and two teachers have 53 pupils in their smallest classes. The middle fifty percent have between 29 and 41 pupils in their largest classes and between 17 and 26 in their smallest classes. "Probably the crowded conditions prevailing in our larger cities are responsible for the size of the classes there." In 1929, Unzicker (245) reported the results of a questionnaire answered by junior high-school principals in twenty-three schools in seventeen cities. The enrolments ranged from 140 to 1,065. The seven smallest schools were excluded because they were not clearly junior high schools. For the sixteen schools there was an average of 24 pupils per teacher. The range was 17 to 33 pupils per teacher. Minimum number of pupil hours per week of 262 teachers of academic subjects in the sixteen schools studied ranged from 330 to 790; maximum number from 510 to 1,120; average number of pupil hours from 469 in School No. 16 to 949 in School No. 2. Principals answered the following question: "What do you think should be the maximum size of class?" Four principals said 25; six, 30; seven, 35; and four, 40. Seven principals said that a teacher should meet not more than 125 pupils a day; eight said 150; and five, 175. The "size of class" for the sixteen schools shows medians of average classes in English of 27.5 pupils; in mathematics, 26.5; social studies, 28.2; science, 30.2; manual arts, 21; home economics, 20.

Lewis (233) reported the result of a questionnaire sent to 270 superintendents in cities of 25,000 or more population requesting their judgment as to "best size of class." The results are based upon a one hundred percent reply. For grades one, two and three, the median was 31.7 pupils; grades four, five and six, the median of the pooled judgment was 32.8 pupils; grades seven, eight and nine, the median was 31 pupils; grades ten, eleven

and twelve, the median, 25.6 pupils. These results are to be considered in no sense standards except so far as expert judgment can be considered reliable. Anderson (219) reported a study in 1928 that had for its purpose to ascertain the typical first year's teaching requirements of graduates of Ohio State University. On the basis of replies from sixty beginning teachers in 1927, only twenty-five percent taught exclusively in the field of their college majors and minors. The daily student-hour load of these beginning teachers ranged from 30 to 191. The median student-hour load was 101. "The median teacher of these sixty beginners taught in three fields of learning, one outside of his major and minor field, and had charge of the study hall one period daily. During school hours his time was completely taken with curricular duties; outside regular school hours, he sponsored the activities of one club. If a man, he coached athletics after school. The daily student-hour load was 101 pupils. He had four preparations to make each day, which, with the grading of his papers and the keeping of his records, were done when school was not in session." Walker and Laslett (246) report the distribution of working time of three teachers in a small high school. For the week studied, an average of eight hours and forty minutes per day were spent in "strictly school work," and two hours and forty-eight minutes per day were spent in extra-curricular activities and community work. The authors recommend that individual teachers formulate a time budget "as protection against excessive demands on their time." In 1928, Blackburn (223) made a survey of the new teacher situation in the public secondary schools of Pennsylvania in towns under 500,000 population. His conclusions on teaching load are: "Half of all new teachers taught between twenty-two and thirty-one periods per week. In junior-senior, senior, and junior schools the tendency was toward shorter hours, while in two-year, three-year, and vocational schools the tendency was toward longer hours." "More than half of all new teachers taught one subject alone, three-tenths taught two subjects, and about one-tenth taught three subjects. Non-academic subjects tended to be taught in single-subject programs. About one-third of all new teachers sponsored no social activity, nearly half sponsored one activity, and about one-sixth sponsored two activities."

Stevenson (239) investigated the problem of the relation of the size of class to school efficiency, or what is the effect upon the efficiency of the school when the size of class is increased or decreased within certain limits? "The problem of the teacher was not considered in this investigation." The opinion as to the "best size" of class was gathered by means of a questionnaire. The experimental situation was to have the same elementary teacher instruct two groups; a large group and a small group. Careful control of conditions was maintained. The pupils were all tested objectively by means of the same tests. The conclusion from this experiment was that the achievement of pupils in large classes and in small classes was practically the same. Later studies made by Stevenson (240), (241), (242), showed that with heterogeneous groups there was very little difference between the achievements of

pupils in large and small classes. The investigator indicated that the burden of proof rests upon the champions of small classes, because the organization of the schools into larger classes is an effective means of making savings in instrumental costs. Evidence so far presented is not sufficiently conclusive to warrant any radical reorganization until more extensive experimentation can be made.

Tope and others (243), in 1924, reported an experiment undertaken for the North Central Association of Colleges and Secondary Schools on the relation of size of class and school efficiency. Three junior English classes were organized as follows: class number one with twenty pupils; class number two, thirty-four pupils; class number three with forty-four pupils. Whether these classes were taught by the same instructor is not reported. The year was divided into six periods and records were kept for each of the six periods. The average for each class for the year was: small class 79.2, medium class 79.4, large class 78. The experimenters do not recommend English as a suitable subject for an experiment of this nature because so much of the work is of discussion type—the type in which the pupil acquires a great deal of his knowledge from the contributions of his fellow pupils. They also point out that the middle group was comprised of two-thirds girls while in the other two groups each were half girls and half boys. They say: "It is generally recognized that boys do not take the interest in English that girls do. This fact might, therefore, help to throw the advantage to the medium-sized class." Cook (226) reported upon the effect of size of class upon quality of work in high schools. The study is based upon data solicited from the entire list of secondary schools accredited by the North Central Association; excepting private schools and the largest high schools. The study utilizes estimates of desirable class size from 5,200 teachers meeting "substantially a half million high school students daily." The cities used in the study are divided into three population groups. Recommendations for size of classes for the three groups of cities are: (a) cities over 50,000 population, a median size class of 23, and not over five percent of all sections may exceed 28; (b) cities of 5,000 but less than 50,000 population, a median size class of 21 to 26; (c) all other approved schools, a median size class of 19 to 24 and not over five percent of the sections to exceed the latter figure. Harwood (230) reported, in 1930, the standards of regional associations for pupil-teacher ratio and teacher load.

One of the most extensive investigations of class size has been made by Hudelson of Minnesota (231). His findings were based upon experiments in 104 classes in eleven departments of the state university. The evidence showed that the matter of class size was relatively a minor factor in educational efficiency since students in large classes did as well or better than those in small classes in the subjects investigated. The characteristics of the group, the nature of the subjectmatter, the room and equipment facilities, and the technics of the teacher are important factors to be considered in studies of class size.

In a questionnaire study of the attitudes of high-school teachers towards large and small classes, Hudelson (232) found that the majority of the teachers favored small classes. He felt, however, that this unfavorable attitude towards the large classes was largely personal and not sufficiently based upon experimental facts to be highly significant. McGuire and Hudelson (234) reported an experiment conducted in the University of Minnesota High School on learning to teach larger classes. The experiment was conducted in teaching plane geometry. The small section consisted of twenty-three pupils; the large section, forty-four pupils. The groups were measured on nine objective tests. The best students and the poorest students did equally well in both classes, but the mediocre pupils were at an advantage in the large class. "For all pupils combined, the large class excelled on every measure of achievement." Both sections exceeded the standard on the two standardized tests that were given.

Tritt (244) conducted a study which reveals that there is, in the opinion of teachers, considerable variation in the teaching difficulty of various high-school courses. "The absence of objective data made it necessary to use the familiar method of averaging a number of subjective opinions." Ninety-one faculty members of a high school were asked to analyze for difficulty the general subjects of the high-school course. "As far as this study goes, however, the average classes of standard high-school subjects rank in weight of teaching load, ranging from the most difficult to the least difficult, as follows: English, 12.1; science, 11.2; foreign languages, 11.1; mathematics, 10.8; social science and music, 10.5; commercial, 9.9; art and home economics, 9; mechanical arts, 8.7; girls' physical education, 7.2; boys' physical education, 7."

Research on teacher load in the college and university field is increasing rapidly. Reeves and Russell (233) suggest a weighted measure of teaching load called an "index of load" calculated by taking for each instructor the ratio of his teaching hours to the average teaching hours per instructor in the college, then adding successively to this the ratio of his preparation hours to the average preparation hours, and twice the ratio of his student hours to the average student hours. The sum so obtained becomes the index of load and is comparable throughout the institution.

Ayer (220) reports a study of teaching load and method of handling in 32 state and 28 non-state universities. The conclusion is stated that in state universities the size of the teaching load decreases as the rank of the faculty member becomes higher and the enrolment at the university becomes larger. Zook (247) reported the facts about teacher load in institutions of higher learning in the North Central Association for 1927-28 (See Table 5). He also reports, "It is perhaps not a cause for alarm that, 7.5 percent of the faculty are teaching more hours than the standard permits. Exceptions always have to be made to this standard (No. 6). The standard itself recognizes this fact."

TABLE 5—TEACHING HOURS IN COLLEGES AND UNIVERSITIES IN THE NORTH CENTRAL ASSOCIATION IN 1927-1928

Description	Number of professors	Percent of the total
1	2	3
Total Faculty	9526	100
A. Number meeting N. C. A. standards.....	8813	92.5
1. Number teaching not more than 12 hours.....	5079	53.4
2. Number teaching 13 or 14 hours.....	1472	15.4
3. Number teaching 15 or 16 hours.....	2262	23.7
B. Number not meeting N. C. A. standards.....	713	7.5
1. Number teaching 17 or 18 hours.....	503	5.3
2. Number teaching over 18 hours.....	210	2.2

In 1929, the committee on teaching load in colleges reported in the *North Central Association Quarterly*, (237). The report was based upon 561 questionnaires to college teachers. Results were: University teachers are scheduled for fewer credit hours per week than college teachers, but total clock hours per week for both groups are practically equal. Total clock hours per week ranged from 15 to 70. The average was 42.5 hours. The committee states that it is unprepared to recommend any change at this time in the fairly generally accepted practice of counting two hours of laboratory practice the equivalent of one hour of lecture or recitation. The committee recommends strongly, "that credit hours in different departments, in different subjects within the same department, and for different teachers, be evaluated or weighted, before fixing definitely the number of credit hours a teacher must offer."

Bush (225) reported the teacher load in eighty-seven public junior colleges for 1928-29. For the typical school the number of classes per teacher ranged from three to six. The number of preparations per teacher from one to five. The number of semester hours per teacher fifteen to eighteen. The administrator reporting recommended maximum number of pupils per class in the academic subjects 30, in commercial, art, and physical education 35, 50, and 50 respectively. McMullen (235) carried on a study in the "service load" in teacher-training institutions of the United States. The main divisions of the service load are: (a) class work, (b) daily preparation for class work, (c) routine work in connection with class work and school administration, and (d) work with individual students or groups of students. These four major constituents of the service load are not of equal value. The proportion that each should bear in determining the "service load" is found by taking the central tendencies of large groups of teachers upon each of these four divisions. Conclusions were: (a) total service load should be considered and made as equal as possible in assigning work to a group of full-time teachers in teacher-training institutions but assignments should be made on the basis

of class hours obtained by using the service load ratios developed for each department of instruction; (b) the practice of stating standards in terms of class hours per week should be continued; (c) the variation in service load is enormous; (d) the hours expended in preparation for daily work show a wide range; (e) the average service load of teachers-college instructors is slightly less than the maximum of the standards adopted by the American Association of Teachers Colleges. The range is too large and should be reduced. Dearborn (227) made a study of the size of classes in relation to service load of state normal school faculty members. He found a direct relation between number of faculty members and student enrolment. In his study he used the service load ratios developed by McMullen. Good (229) reported, in 1929, brief reviews of certain studies on teaching load made in the field of college teaching.

CHAPTER VII

Teacher Rating

WHAT are the important qualities of successful teachers? What correlations exist between the various proposed items of rating scales? How are teacher rating scales used? Studies on these and similar questions are reviewed in this chapter.

Determining Desirable Teacher Traits

Opinions of pupils—The following studies report compilations of the opinions of pupils of various ages concerning the most desirable traits of teachers: Kratz (292), 1896, 2,411 pupils in grades two to eight; Book (257), 1905, 1,067 high-school students; Bird (253), 1917, high-school pupils; Dolch (271), 1920; Robinson (316), 1924, several thousand high-school juniors; Davis (268), 1926, collegestudents; Ryle (319), 1928, high-school seniors; Jordan (284), 1929, 150 high-school seniors; Birkelo (254), 1929, 614 college students; Newmark (309), 1929, normal school students; Hanthorn (279), 1930, 6,404 children in elementary schools; Light (294), 1930, high-school students. A tabulation of the items mentioned with greatest frequency in these studies gives the following results: fairness was included in the group of the most importance by seven of the studies; kindness and instructional skill each in six studies; in five studies, good-natured or pleasant, good disciplinarian, knowledge of subjectmatter; in four studies, sense of humor, patient; in three studies, personal appearance, inspiring, sociability, interest in work, personality; and in two studies, strong character, sympathetic, ability to make class interesting; and the following were among the most important items in one study each: politeness, neatness, serious and dignified, interest in pupils, broad educational interest, efficiency in use of class time, intelligent, broad-minded.

Opinions of educators and others—The following studies report compilations of opinions of superintendents, school board members and others as to desirable traits of teachers: Andersen (249), 1917, 420 superintendents and 183 presidents of school boards; King (287), 1925, 92 city superintendents; Davis (269), 1929, 148 superintendents; Jordan (284), 1929, 120 teachers, 100 supervisors, 120 school patrons; Almy and Sorenson (248), 1930, 77 persons engaged in educational work. The following were included among the most important traits in three studies: discipline, teaching skill, personality, cooperation; in two studies: scholarship, daily preparation, fairness. Physical health and fitness, intelligence, and resourcefulness were found to lead all other traits in one study each.

Charters and Waples (264) as a part of the Commonwealth Teacher Training Study, obtained an extensive list of teachers' traits and trait ac-

tions from a group of administrators, teachers, and others. The 83 traits found on the first classification were telescoped into 25 traits. The nature of the traits which have been placed by competent judges as among the ten most important traits for at least four out of the five types of teachers for whom such rating was obtained is indicated by the following list: adaptability, considerateness, enthusiasm, good judgment, honesty, magnetism, and selfcontrol.

Traits appearing on rating blanks—The following studies report the examination of a number of score cards used to rate teachers: Clarke (265), 1918, 111 score cards; Phillips (311), 1923, 22 scales; Kimball (285), 1923, 54 rating plans; King (287), 1925, 103 rating scales; Dozier (272), 1926, 224 letters of reference; Trow and McLouth (325), 1929, 25 rating blanks. These studies show a wide range in the traits which are found with greatest frequency in the different groups. Teaching technic, discipline, teaching results, and personality appear among the important traits in the largest number of studies.

Causes of teacher failure—The following studies, tabulating actual reported causes of failure of teachers, present a negative approach to the problem of the characteristics of successful teachers: Moses (304), 1914, 205 high-school teachers; Littler (295), 1914, 676 elementary teachers; Buellesfield (262), 1915, 145 elementary and 98 high-school teachers; Andersen (249), 1917; Ritter (315), 1918, 69 teachers; Nanninga (307), 1924, 112 high-school teachers; Madsen (297), 1927, 31 teachers; Morrison (302), 1927, interviews with 40 administrators; James (283), 1930, 118 teachers. The following items are among the causes of greatest importance in eight studies: poor instruction and lack of discipline; in six studies, inability to cooperate and lack of scholarship; in four studies, personality and laziness; in three studies, lack of interest in work, lack of preparation, and lack of sympathy. The following are among the important causes reported in one or two studies: lack of judgment, inability to understand children, deficient in enthusiasm and optimism, lack of initiative, indiscreet conduct, inability to get along with pupils, gossip, temper, too many dates, and intimacy with pupils.

Statistical Studies of the Scores on Rating Scales

Reliability of the ratings—Two applications of the same rating scale by the same raters to the same teachers have furnished the following correlations: Almy and Sorenson (248), .92; Gipson (277), from .66 to .96; Remmers and Brandenburg (314), from .50 to .83.

Ratings of the same group of teachers by the same individuals using different scales have resulted in the following correlations: Cahoon (263), .66; Gipson (277), from .58 to .93, depending on the scales compared; Jacobs (282), from .54 to .70.

The correlations between applications of the same scale by different individuals are as follows:

French (276)	Principals and investigator	.75
Waid (328)	{ Principal and supervisor	.76
Nanninga (306)	{ Principal and supervisor (average of three years)	.70
Stopher (322)	Principal and assistant principal	.82
Boardman (256)	Principal and superintendent	.45
Knight (289)	Supervisor and other teachers	.68
Kinder (286)	Supervisors and other teachers	.96
Flory (273)	Supervisor and teacher in charge of room	.54
	{ Self-rating and ratings by two friends	.49
Waid (328)	{ Self-rating and ratings by five friends	.56
	{ Self-rating and rating by principal	.51
Boardman (256)	{ Self-rating and rating by supervisor	.43
Knight (289)	Pupils and other teachers	.66
Boardman (256)	Pupils and other teachers	.68
Knight (289)	Pupils and supervisors	.56
	Pupils and supervisors	.74
Nanninga (306)	{ Graduate students and principal	.47
Hamrin (278)	{ Graduate students and assistant principal	.76
Almy and Sorenson (248)	Two supervisors	.32
	Two raters	.72

Relationship between general merit and specific traits—Ruediger and Strayer (317) in 1910 obtained, by means of Woodworth's "percent of displacement method," correlations between specific items on the scale and general teaching ability. The range was from .04 for health to .56 for ability to maintain order. Boyce (259) in 1912 published correlations for twenty-two items. The range was from .18 for health to .90 for instructional skill. Half of the coefficients were below .60. In 1915 Boyce (258) reported a new set of correlations covering forty-five items. The coefficients ranged from .38 for professional preparation to .88 for general development of pupils. The average correlation was .70. In 1918 Bradley (260) found correlations ranging from .59 for physical efficiency to .86 for school management. Only one coefficient was below .70. Fordyce (274) in the same year reported a range of correlations from .59 for personality to .79 for technic of teaching. Baird and Bates (251) in 1929, using the six large headings on the blank, found a range of correlations from .57 for social intelligence to .85 for control over method. In 1930 Waid (328) obtained correlations ranging from .16 for use of English to .84 for ability to make an assignment. A majority of his coefficients were over .60.

Intercorrelations between the traits—Boyce (259) in 1912 reported the correlations of instructional skill with other factors as ranging from .40 to .65; and the correlations of the trait success of pupils with other factors as ranging from .50 to .86. Knight (289) in 1922 computed the 120 intercorrelations between 15 different traits. He found the distribution of these 120 correlations to be: .10 to .20, four; .20 to .30, two; .30 to .40, fifteen; .40 to .50, thirty-eight; .50 to .60, thirty; .60 to .70, nineteen; .70 to .80, eight; .80 to .90, three. From this distribution, and from other considerations, he con-

cluded that the intercorrelations may in general be explained on the basis of chance variation and the spread of general estimate.

Waid (328) in 1930 reported a few intercorrelations for his data, using only the major characteristics on the blank. He found the correlations to range from .16 to .87. For the 22 correlations computed, the distribution in the eight size groups given above are as follows: 1, 0, 4, 6, 5, 4, 0, 2. This distribution is sufficiently similar to that given by Knight to be at least suggestive of the same explanation.

Knight, Ruch, Bathurst and Telford (290) found the intercorrelations between the various sections of their set of tests for teachers to range from .21 to .53. Morris (300) in 1929 found the intercorrelations between the various measures of personality traits which she used to vary from -.33 to .55. The majority ranged from .20 to -.20. Remmers and Brandenburg (314) in a series of intercorrelations based on ratings of one instructor by students found only two correlations above .25. For another instructor most of the coefficients were below .33.

Relationship of Estimates of General Teaching Ability to Independent Measurable Factors

General and professional training—The following are the correlations which have been found between ratings and training:

Davis and French (270)	Professional training .....	.41
Ritter (315)	College training .....	.29
Waid (328)	{ Supervisor's rating .....	.01
	{ Principal's rating .....	.03
	{ Self-rating .....	.47

Scholarship—The following list gives the correlation between the type of scholarship indicated in each case and estimates of general teaching ability:

Somers (321)	High school marks .....	.77
Whitney (329)	Secondary school record .....	.09
Somers (321)	Normal school success .....	.73
Knight (289)	Normal school records .....	.15
Wagenhorst (327)	First year in normal school .....	.01
Ritter (315)	Average scholarship .....	.65
Hamrin (278)	{ School marks (ratings by supervisor) .....	.45
	{ School marks (ratings by superintendent) .....	.05
	{ First semester in normal school .....	.60
Somers (321)	{ Two years' marks in normal school .....	.71
Almy and Sorenson (248)	Last semester academic grades .....	.45
Knight (289)	College records .....	.60
Kolstad (291)	Average grade in academic courses .....	.06
Meriam (299)	Grade in academic courses .....	.22
Whitney (329)	{ Academic marks in normal school .....	.07
	{ Professional marks in normal school .....	.14
Almy and Sorenson (248)	Marks in practice teaching .....	.69
Pyle (313)	Grades in practice teaching .....	.15

Stopher (322)	Grade in practice teaching.....	.30
Knight (289)	Grades in history.....	.24
	Grades in science.....	.27
	Grades in geography.....	.37
	Grades in arithmetic.....	.00
	Grades in English.....	.04
Meriam (299)	Grades in methods courses.....	.29
	Grades in history and principles of education.....	.28
	Grades in psychology.....	.37
Somers (321)	Extra-curriculum activities.....	.41
	Discipline in normal school.....	.53

Intelligence—The following writers have reported coefficients of correlation between intelligence and teaching ability: Boardman (256), .33; Hamrin (278), .04 and .20; Knight (289), .16; Kolstad (291), -.04; Pyle (313), .03 and .02; Somers (321), .43; Stopher (322), -.06; Tiegs (324), .01; Wagenhorst (327), .00; Whitney (329), .03.

A number of writers have attacked the problem of the relation between intelligence and teaching ability by a method other than the use of correlation. Payne (310), 1918; Bliss (255), 1922; and Madsen (296), 1924, compared measures of intelligence and measures of teaching skill for certain groups of teacher graduates. In each case a positive relationship between the two factors was reported. Pyle (313) in 1927 gave a series of simple psychological tests to five teachers who had proved to be very successful and five others who had proved to be failures. He found that the good teachers excelled the poor in all but two of the tests. Waddell (326) in 1927 found only a very slight difference in practice teaching grades between the highest five percent and the lowest five percent on the Army Alpha Test.

Experience—The following correlations have been reported between experience and teaching ability: Barthelmess and Boyer (252), (correlation ratio) junior high-school teachers, .35, elementary, .27; Boardman (256), local experience, .24, total experience, .39, experience previous to present position, .31; Boyce (259), .43; Davis and French (270), .23; Knight (289), .04; Ritter (315), .75; Waid (328), principal's rating, .23, supervisor's rating, .20, self-rating, .43.

Age—The following correlations have been reported between age and general teaching ability: Boardman (256), .34; Knight (289), .08; Somers (321), .07; Waid (328), principal's rating, .23, supervisor's rating, .19, self-rating, .42.

Salary—The correlations which have been obtained between salary and teaching ability are: Knight (289), .35; Landsittel (293), from .10 to .28; Morton (303), rural teachers, from .03 to .51, average .40; urban teachers, from -.08 to .49, average .25; Ritter (315), .65.

Credits earned since beginning teaching—The correlations obtained between this item and teaching success are: Barthelmess and Boyer (252), junior high-school teachers, .19; elementary, .16; Knight (289), .33; Waid (328), principal's rating, .18 and supervisor's rating, .25.

Professional tests—Various investigators have devised tests dealing with professional material and have correlated the grades earned on these tests with ratings on general teaching ability. The coefficients follow:

Boardman (256)	{ Methods of procedure.....	.28
	{ Professional information.....	.26
Hunt (281)	Aptitude test.....	.30 to .50
Knight (289)	Professional test.....	.61
Knight, Ruch, Bathurst and Telford (290)	Aptitude test.....	.38
Tiegs (324)	Knight, Ruch, Bathurst and Telford Test.....	.02

Traits related directly to teaching—Boardman (256), obtained ratings of teacher efficiency from groups of pupils, and also asked them to indicate (a) teacher for whom they worked hardest, (b) teacher they liked best, (c) teacher's ability to discipline, and (d) teacher from whom they learned the most. The correlations between these traits and general teaching ability were: (a) .73; (b) .82; (c) .75; and (d) .89.

French (276) obtained ratings of teaching ability, and also scores on thirteen measurable classroom activities. He found a correlation of .82 between attention and general ability. The second highest coefficient was .65, with "number of questions that are thought-provoking." The lowest was -.13, with "number of times the teacher repeats pupil's response."

Further Statistical Treatment of the Data

Partial correlations—Somers (321) computed, among others, the correlations between general teaching ability and each of the following three factors, in each case partialling out the other two: intelligence test, .03; personality, .33; first-semester marks, .25. Whitney (329) computed all of the intercorrelations and all of the partial correlations, eliminating one factor at a time, between teaching success after graduation and six separate items. The partial coefficients were all insignificant. Knight (289) obtained the partial correlations between general teaching ability and each of the following three factors, with the other two held constant in each case: intellectual keenness, .09; normal-school standing, -.21; score on professional test, .57. Boardman (256) computed the partial correlations between general teaching ability and the following four items, with the other three held constant in each case: psychological test, .22; professional information test, .03; procedures test, .11; experience in teaching, .38.

Multiple correlations—Boardman (256) reports a number of multiple correlation coefficients. The correlation between teaching ability and procedures test, professional test, psychological test, and experience is found to be .51. Morris (300) reports a multiple correlation coefficient of .69 between practice teaching and the following: academic averages, health grades, intelligence scores, public opinion test, sympathy scores, trait index (leadership). Whitney (329) calculated a large number of multiple correlations between his criterion of teaching success and various combinations

of variables. The most important is that of .29 between the criterion and all other measures: intelligence, secondary record, academic marks, professional marks, student teaching, and physique. When fewer variables were used the R's were all less significant. Somers (321) presents the multiple correlation coefficients between teaching-in-field and the measures he used. In general, using from two to four variables, he finds R's ranging from .60 to .75.

Regression equations—In the attempt to predict teaching success the following writers have computed the regression equations of some measure of general teaching ability in terms of the variables used in the particular study: Boardman (256); Morris (300); Somers (321); Whitney (329).

Rating Practice Teaching

Practice teaching and intelligence—The following correlations have been obtained between various measures of intelligence and measures of teaching ability while doing practice teaching: Broom (261), .30; Cahoon (263), from .00 to .14 for different tests; Cooper (266), mean square contingency, .22; Frasier (275), from -.03 to .25; Hamrin (278), .20; Kinder (286), .54; Morris (300), .23; Pyle (313), -.02; Shultz (320), .09; Stopher (322), .24.

Practice teaching and school marks—The following correlations have been reported by various writers for these two variables:

Hamrin (278)	School marks	.45
Mead and Holley (298)	General scholarship	.24
Shultz (320)	Scholarship	.43
Morris (300)	Academic average	.55
Kinder (286)	Grades in general course	.69
Cooper (266)	Academic grades (Mean square contingency)	.33
Shultz (320)	Grade in Latin	-.00
Mead and Holley (298)	Scholarship in major subject	.19
Broom (261)	Grades in educational courses	.21
Kinder (286)	Grades in educational courses	.60
Mead and Holley (298)	General methods course	.57
Zant (330)	{ Grades in methods course	.32
	{ Grade in psychology	.30
Stopher (322)	Grade in practice teaching	.78

Relationship between practice teaching and teaching in service—The correlations computed between these sets of ratings are: Armentrout (250), .29; Hamrin (278), .06 to .23; Kolstad (291), .16; Knight (289), .06; Meriam (299), .39; Myers and Beechel (305), .19; Pyle (313), .15; Somers (321), .70; Stopher (322), .19; Taylor (323), .21; Wagenhorst (327), .23; Whitney (329), .24.

Judging the Teacher by Results

Crabbs (267) made use of Franzen's AR formula in the attempt to determine teaching success directly in terms of the results achieved. She obtained measures of initial and final mental age, and achievement ratios for:

reading, arithmetic, spelling, composition, and penmanship. From these she computed the measure of teacher efficiency in terms of the changes effected in the pupils. Very little relationship was found between ability to teach one subject and ability to teach the other subjects. For composite objective efficiency and supervisor's ratings, the correlation was .32 for rural and -.26 for urban teachers. Taylor (323) obtained ratings of teachers by principals and by the head of a city research department, and correlated these with results obtained in classes. He found the correlation between rating and results in arithmetic to be .14, and results in reading to be -.05. Partialling out initial score, intelligence of class, and over-ageness the correlations were .15 for arithmetic and .17 for reading. Hill (280) obtained ratings of teachers by supervisors and the results of their classroom instruction in reading, spelling, and arithmetic. For all of his teachers the correlation between ratings and results of instruction was .45. There was considerable variation in the correlations obtained for various school systems.

Criticisms of Rating Scales

Distributions of ratings as given—Rugg (318) found the following distribution of ratings of elementary teachers in a large city system in 1917: superior, 1118; excellent, 3299; good, 2440; fair, 251; inefficient, 23. The distribution of the ratings for high-school teachers was similar. Morrison (301) in 1919 studied the ratings given by 87 supervisors in New Jersey. He found that 47.4 percent of the teachers were rated very good, and 39.3 percent average (the two highest ratings). Davis and French (270) in 1928 examined 2,156 rating cards. Over 70 percent of the teachers involved were teaching in fourth class districts, and more than 73 percent were neither normal school nor college graduates. Over 53 percent were rated above average, and 45.3 percent average. Landsittel (293) reported in 1917 the ratings given by state inspectors in rural and village schools. He found the distributions to be very skewed on most of the separate factors, but almost normal on the total scale.

Effect of acquaintance on rating—Knight (288) obtained ratings by supervisors of 1,048 teachers, and separated from the entire group those cases in which the teacher had been known for one year, for seven years, and for eight years or more. He found that acquaintance increased the spread of general estimate and also increased over-rating.

The Use of Rating Scales

Several investigations have been made of the number of cities in which rating scales are being used. The latest and most comprehensive study of this type was reported in a *Research Bulletin* of the National Education Association (308). Among cities of over 100,000 population, 71 percent use rating; 30,000 to 100,000, 64 percent; 10,000 to 30,000, 37 percent; 5,000 to 10,000, 42 percent; 2,500 to 5,000, 38 percent.

Summary

The data presented in this chapter may be summarized briefly as follows: Lists of teacher traits obtained from pupils, teachers, administrators and others, from rating blanks actually in use, and negatively from studies of teacher failure, reveal a wide range of traits which are considered most desirable by different groups. When the same teachers have been rated twice by the same raters using the same scale, by the same raters using different scales, or by different raters using the same scales, the correlations are usually reasonably high, in some cases .90 or over. In most cases, there has been found a rather high correlation between the particular items on the blank and general merit. Intercorrelations between traits give evidence of the spread of general estimate and chance variation. Correlation studies have, in general, failed to reveal any significant relationship between general teaching ability and training, scholarship, intelligence, experience, age, salary, credits earned, or professional tests. The partial correlation technic fails, in most cases, to bring out any more significant relationship. By means of multiple correlation it is sometimes possible to obtain a coefficient which seems to be high enough to justify prediction. No significant relationship was found between ratings of practice teaching and intelligence, scholarship, or ratings on later service. Attempts to determine teaching ability by measuring results are not entirely satisfactory. Most raters rate too high, thereby producing a very badly skewed distribution. Acquaintance increases the tendency to overrate, and the spread of general estimate. At present over 40 percent of cities use rating scales, the percentages being higher for the larger cities.

CHAPTER VIII

Ethics of the Teaching Profession

THE literature on the ethics of the teaching profession is meager compared with many other phases of the profession. Productivity, however, during the last half dozen years has been at a much accelerated pace which proves that more and more interest is being shown in this important movement. Although much valuable work has been done, the field is still largely a virgin one for scholarly investigations and treatises.

Practically all of the literature has been written on a subjective rather than an objective basis. It has consisted of theory and opinion rather than of demonstrated fact and science. While this appraisal implies a need for more research and more facts, it is not a condemnation of what has already been done for it is realized that valuable non-research contributions can be made to the literature of a field.

Most of the early literature consists of periodical articles advocating a code of ethics and proposing certain ethical standards to follow. The more recent literature has as its most common theme a description of codes which have been adopted by local and state educational organizations. Numerous articles on the two aforementioned themes have appeared in the last ten years in the organs of state education associations; since those articles are primarily of local interest they are not included in the bibliography of this survey.

Work of the Committee on Ethics of the National Education Association

History of the committee—In 1924, at the Washington, D. C., meeting of the National Education Association, a committee to formulate a code of ethics for teachers was appointed. It conducted numerous investigations, held several meetings, made many reports of progress, and at the Atlanta, Georgia, meeting of the Association in 1929 it made its final report (339). As a part of its final report, the committee submitted a code of ethics which was unanimously adopted by the delegate assembly.

Common unethical practices of teachers—In one of its questionnaires which was sent to some 3,000 members of the profession the committee requested each respondent to list the six most common and serious unethical practices in which certain members of the profession engaged (339). Three hundred and twenty-seven different unethical practices were mentioned, but of these 327 there were 111 mentioned but once; 53 practices were mentioned 10 or more times. The 10 practices mentioned most frequently were in rank order: (a) gossiping about and criticizing other teachers; (b) slurring the profession; (c) breaking contracts; (d) applying for positions not known to be vacant; (e) exaggerating qualifications; (f) cultivating friendship among board members and their families in an attempt to exer-

cise a pull; (g) failure to be a progressive student of education; (h) failure to support school policies until they are changed; (i) underbidding for positions; and (j) going over the heads of administrative superiors.

Analysis of state codes—In one of its reports (338) the committee summarizes an analysis of the then extant codes of 27 state education associations. This analysis showed that in all of the codes 86 different duties and obligations were mentioned. There were a few matters upon which practically all of these codes deem it necessary to have pronouncements. Thus 20 or more of them enjoin the members of the profession to keep in mind the necessity for professional growth; to hold contracts inviolable, and to refrain from criticizing predecessors or associates. From 12 to 19 of them affirm that teachers should have membership in teachers' associations, local, state, and national; apply only for vacant positions; seek and expect advancement only on basis of merit; refrain from employing teachers already under contract, unless the consent of the present employers is secured; cooperate with administrative officials, cooperate with parents; and take part in community activities. From six to eleven of the codes say that teachers should maintain an open mind toward new methods; withdraw outstanding applications as soon as a position has been accepted; refrain from self-advertisement; help worthy teachers to secure promotions; insist on adequate compensation, but should not limit service because of low pay; abstain from underbidding for positions; be early notified of re-election; refrain from "going over the heads" of superiors; cooperate with boards of education; show no ill-feeling toward other teachers before pupils; expose corrupt or otherwise unprofessional practices among teachers; be willing to aid one another; deal with pupils in a spirit of kindness and cooperation; refrain from tutoring one's pupils for pay; refrain from accepting unearned commissions and royalties; and help to recruit the profession with some of the choicest spirits. Sixty other obligations and duties were enjoined, but those were mentioned in fewer than six codes.

National Education Association Code of Ethics—Although the code is far from perfect, it is nevertheless excellent and will do an important service for the profession through (a) pointing out to any uninformed members of the profession, particularly the new entrants, examples of ethical and of unethical practices, and (b) warning any Judas Iscariots of the profession that unethical practice is discountenanced by the whole profession. Unquestionably the code is the most important single contribution to this field, and if it and its revisions—undoubtedly there will be revisions as the years go by—accomplish for the teaching profession only a fraction of what the ancient *Hippocratic Oath* and its revisions have accomplished for the medical profession, the code will become an immortal document in the annals of the profession.¹

¹The code of ethics of the National Education Association is published in "Ethics in the Teaching Profession" *Research Bulletin* 9: 88-89; January, 1931. Washington, D. C.: the Association.

Other References

Doctor's dissertation—Up to November, 1930, information is available on only one Ph. D. dissertation, namely, that by Landis (335), on any phase of teachers' ethics. In his study Landis made a sociological analysis of code-making and code-enforcement in twelve professional but non-teaching organizations, and undertook to show how the experiences of these organizations might be applied to code-making and code-enforcement in the teaching profession. His study is descriptive, interpretative, and critical.

Books and chapters of books—Walsh has written the only textbook (342) which is entirely devoted to teachers' ethics. This book discusses the more serious and prevalent friction-causing practices in the profession, and includes many interesting cases of ethics; a complete bibliography, up to the date of publication (1926), is included.

Heermance has published a book (334) which is a compilation of 198 codes of ethics of various professions. Taeusch's book (340) contains an interesting and provocative chapter on the ethics of the teacher. Other books which contain chapters on teachers' ethics are those by Almack (331) and Lewis (336).

Articles in periodicals, and bulletins—These references are less pretentious than those heretofore mentioned and are found as a rule in the educational periodicals. Particularly noteworthy in this list are references (332, 333, 337, 341).

CHAPTER IX

Health of the Teacher

ROGERS (362) made a thorough survey of investigations up to 1926 in the field of the health of the teacher. Terman (363) presented a brief review of investigations made prior to 1913. Ulrich (364) reported the findings from physical examination of 3,000 rural teachers.

There is considerable information available regarding teachers' absence for illness. Rogers (362) reviewed the findings from all over the world. Carrothers (343, 344) studied several phases of teachers' absence due to illness for Cleveland, Ohio, and Springfield, Massachusetts. He related such absence to sex, age of teacher, type of subject, types of pupils, and days of the week taught. Other investigations include those of Hughes (351) for Pasadena, Dublin (347) for New York City, Chapman (345) for Baltimore, and Curtis (346) for Cleveland. Questionnaire studies were made by the Metropolitan Life Insurance Company (357), by Dublin (347) for New York City, by Garvin (349) from twenty-three school administrators, by Linton (356) from teachers colleges, and by Kidwell (353) and Kirk (354) for teachers of physical education. Wood and Rowell (366) reviewed a report of the New York State Commission on Welfare of the Teacher and findings of other studies on teachers' health.

A large number of reports of provisions of individual cities for absence of teachers for illness are in the literature. An issue of the *Research Bulletin* of the National Education Association (360) brings together present practices regarding pay during absence for illness. This same bulletin reports practices regarding leaves of absence, as did also Greene (350).

Suggestions for improving the health of the teacher are found in most of the writings. Recommendations of Rogers (362), Terman (363), of the bulletin of the Metropolitan Life Insurance Company (357), and of Wood and Rowell (366), are perhaps the most complete.

Are Teachers Healthy?

"So far as the death rate is indicative, teachers are, as a class, remarkably healthy. When the number who are sick and their length of absence are compared with the records for industrial workers and clerical groups, the health of the teacher remains superior." (362:14). Even neurasthenia and other nervous disturbances do not occur any more often among teachers than among those in other occupations who deal with people (362:15). Supervisors report that about one-third of the New York teachers are nervous, irritable, low in vitality, or affected with other handicaps (366:514). "Among 1000 rural teachers 1106 defects were found; 23 percent had defective tonsils, 22½ percent had defective vision, 21½ percent defective posture, and 17 percent defective teeth." (364:727). The Metropolitan Life

Insurance Company found that nervous diseases are the chief cause for long expensive illness among teachers (357). Most frequent causes of teachers' illness are diseases of the respiratory system, though the teachers are not more subject to these diseases than are other indoor workers (362:15). Illness caused by digestive disorders is less common among teachers than among other workers (362:15). Tuberculosis does not appear to be a significant cause but laryngitis is considered by some a true occupational disease of teachers (362:15).

Amount of absence for illness—Quite a number of records have been kept of the annual amount of teacher absence due to illness. The average is between two and four days. Women are absent approximately twice as much as men. Ailments peculiar to women are of little significance in teacher absence (360:233). Carrothers reports that absence for illness is greater among married than single women and among single than married men; also, that younger teachers have greater amounts of recorded sickness than older ones (343:42). The disparity in the amount of absence for men and women teachers was greater than in occupational groups (343:74). Curtis discovered that in Cleveland 11 percent of the teachers furnished 50 percent of the illness (346:171). In New York City the average length of illness over a one year period was one and a third days for the men and three days for the women; and "the sickness rate of school teachers increases steadily with age." (Compare with Carrothers, 343:42.) The rate of illness of teachers between fifty-five and sixty-four years of age was slightly over twice the rate of those between twenty and twenty-four (347:567). Hughes for Pasadena found no relationship between age and length of sick leave (351:27). The amount and duration of illness increased with age among teachers of New York, London, Victoria, and Richmond (362:13).

Carrothers reported no relationships between the amounts of illness and the "size of class, type of school, grade and subject taught, teaching in foreign sections or in congested areas, size of building, amount of salary received, experience, education, and efficiency rating" (343:42). Those who did extra teaching had less than average absence (343:13). Also, Carrothers found that disabling sickness among the teachers in Cleveland was greater than in other professions. Hughes found the largest amount of sick leaves on Monday, and a gradual decrease for the rest of the week. From 37 to 38 percent more illness was found among the men on Monday than on Friday by Carrothers (343:40). Rogers reported ". . . there is nothing to indicate that the teacher is . . . absent on account of sickness more than any other worker" (362:17). However, Carrothers found in Cleveland that teachers averaged more days of absence for illness per year than did other employees in the city (343:67).

Means of Raising the Health Level

Twenty-four percent of the 222 institutions that reported to Linton (356) required health testimonials, whereas 20 percent demanded health certi-

ates. Of 190 institutions training teachers, nine required health certificates for admission and 88 gave physical examinations to students before or soon after entrance. Eighteen required physical examinations of faculty members before employment. A number of writers recommend minimum health standards for entrance to teacher training, a thorough training in mental and physical hygiene as part of the course, definite corrective steps while in training, and certificates of physical fitness upon graduation. Rogers has written as follows:

" . . . We obviously need to develop, if possible, some means of determining the degree of 'fatiguability' or that peculiar physical state which predisposes to irritability or to neurasthenia. Some means also of determining the mental attitude and reaction of the applicant or novice toward child behavior in the classroom would be of inestimable value. Where one teacher has but slight immunity to tuberculosis, and will be subject to conditions which will light up a latent infection, there are ten who possess a nervous mechanism or a mental background which is highly susceptible to nervous exhaustion and which will certainly be exposed to the conditions which will bring about this unfortunate state" (362:19).

About half the states have laws or regulations requiring medical examinations or certificates of health as prerequisite to employment (362:30). "An increasing number of boards of education are requiring an annual physical examination of all employees" (355:405). Exclusion of teachers with tuberculosis is specified in 12 states. Twenty-nine of the 48 school systems reported to the Metropolitan Life Insurance Company stated that health examinations were required for employment of teachers.

Twenty-three school administrators reported to Garvin (349:51) that all schools have rest rooms for teachers. Many gave free examinations once a year and provided recesses in the grades and a free period for the teacher in high school. The insurance bulletin recommends, in addition, probationary periods for the correction of defects, a cooperative health supervision, improved living conditions of teachers, and required absence for certain minor ailments (357:23-27).

Sick Leave

Ninety-one percent of the 1532 cities reporting to the National Education Association grant sick leave with some salary. A majority of the cities allow such leave with full salary (360:233). The average annual amount granted is 10 days, although the average absence because of sickness among teachers is less than four days a year (360:233). Occasionally the sick leave is tied up with an annuity plan as in Mobile (358:132). A number of schools have a cumulative sick leave plan by which days not used during any one year may be used in subsequent years, and a few schools combine a cumulative sick leave plan with leaves of absence, allowing teachers who have accumulated as many as one hundred days to attend school or travel for a term, with full or half pay (360:233). The *Research Bulletin* of the National

Education Association presents the arguments for and against sick leave, giving on the one hand, arguments for increasing teaching efficiency, and on the other, danger of abuse of such a privilege (360:233).

Sabbatical Leaves

Over 60 percent of the cities of ten to twenty thousand population grant leave for professorial improvement (360:225). Some of these give part pay and some do not. Eight essential elements for the effective administration of such a plan are presented in the bulletin of the National Education Association (360:226). The arguments for leaves of absence are primarily increased teaching efficiency through stimulation, rest, and professional improvement occurring during such leaves.

CHAPTER X

The Legal Status of the Teacher

WITHIN constitutional limits the legislature may legally prescribe all of the rights and duties of the teacher or delegate specific or general powers to state, county, or local school authorities. Delegated powers may be recalled. Because of the variants in the delegated powers and because the determination of the legal status is a state matter, there exists considerable variation in the teacher's legal status (369:148).

Investigators have put into organized form the legal provisions regarding teachers and from these have set up general principles. Studies made include analyses of court decisions regarding all phases of teacher status (392:27); reviews of court decisions regarding specific phases of the problem (368, 369, 370, 371, 376, 379, 383); compilations of statutory enactments (369, 372, 374, 378, 381, 382); examinations of the contents of teachers' contracts (367, 369, 391); judicial decisions of the chief state school official of New York (370, 379); and a study of the legal status in a single state (375). A brief review of the legal status is made by Lewis (386) in his book *Personnel Problems of the Teaching Profession*. Compilations of the school law are issued by practically every state department of education. Edwards (377) has written a valuable report on *Where and How to Find the Law Relating to Public School Administration*.

Reports as to Status

Certification—Uncertified teachers cannot receive public funds for teaching (368:14). Certificates may be revoked only for statutory causes (368:12). Prerequisites of certificates sometimes are oaths of allegiance, declarations of loyalty, or proof of citizenship (370:53).

Employment of teachers—Employment is the province of the local board (386:431), although sometimes the superintendent of schools has the right of nomination (394:102). Although some states permit the employment of teachers for periods up to four years (394:102), teachers not under permanent tenure are almost all hired under one year contracts. In a number of states administrative officers are legally employed for periods up to five years. In tenure states a teacher who is re-employed at the end of his probationary period is permanently employed, unless removed for statutory cause through a specified procedure. In 19 states the employment of relatives of board members is either forbidden or restricted (369:164). State legislative provisions which control the employment of teachers are presented in Table 6.

In some states practically all of the qualifications and duties of the teacher are prescribed by statutes or controlled by state department regulations (369:124). In 28 states the state authorities set up contract forms

TABLE 6. LEGISLATIVE PROVISIONS RELATING TO THE EMPLOYMENT OF
TEACHERS

Legislative Provisions	Number of States
1	2
Certificate of health.....	8
Taking of an oath of allegiance.....	8
Not addicted to tobacco or opiates.....	1
Prescribing minimum salaries.....	16
Regarding pay when school is closed.....	15
Forbidding teaching by aliens.....	10
Forbidding sex discriminations in salary.....	6
Concerning janitor service by teacher.....	5
Pay for absence for illness.....	4
Pay for vacation time.....	7
Religious discriminations prohibited.....	4
Tenure provisions.....	12

(394:531). In those states in which general powers are given to local boards, the legal status of the teacher may be affected through contractual agreement with the teacher, and the local board may within reasonable limits "impose additional eligibility requirements such as physical or mental tests, examinations, sex, residence, experience . . ." (368:6). Under such rights approximately 10 percent of the schools reserve the power to terminate the contract at any time upon specified notice, usually 30 days. Ten percent provide for dismissal of women teachers upon marriage. Other provisions found in contracts, but not in state codes, are for dismissal for assignment of salary, a second garnishment of wages, work at any other calling, and membership in a teachers' federation (369:57).

In states in which only specific powers are granted to the local boards, or in which most of the duties, rights, and conditions of employment are expressly stipulated by statute, the local boards have little or no power to affect the legal status of the teacher. Thus women teachers who are under permanent tenure laws cannot be dismissed upon marriage (370:103), salaries paid must be in accordance with minimum state salary schedules, and dismissal can only come about under conditions prescribed in the law. Such conditions must include a cause specified in the statute, and must usually come only after the teacher has been notified of the charges against him and has had an opportunity to answer such charges (383:195). In some states sex discrimination in salary is forbidden, as is religious or political discrimination. Courts have held that political activity, even in opposition to the candidacy of board members is permitted teachers (373:41). Campaigns through pupils, carried on in the classroom for political purposes, however, have been held to be unprofessional conduct and to justify discipline by the board (373:42). Toleration of inefficiency does not prevent later discharge of a teacher (373:52).

Causes for dismissal—Specific reasons for dismissal provided in the law include such causes as: immorality; incompetency; neglect of duty; violation of rules; breach of contract; cruelty; intemperance; untruthfulness; failure to teach state requirements, such as the effect of alcohol on the human system; wearing religious garb on duty; acting as agent for a supply company; treasonable or seditious acts or words; or violation of law. Other state statutes make a blanket provision, such as "for good and sufficient cause" or "when the best interests of the school require it, in the opinion of the board." (390:51-53), (369:166).

Rules of boards of education affecting the legal status of a teacher include forbidding the receipt of gifts from pupils, the tutoring of pupils for pay, or the subscription to gifts for superintendents or board members. The regulations as to the actual teaching to be done and the duties of the teacher on the premises usually are found in the rules and regulations of school boards.

Protection against and liability for libel or slander—"A teacher is protected from wanton or malicious insinuations that may injure his reputation or may tend to injure him in his profession." (386:450). "A teacher is liable to action if he makes statements concerning a pupil which may injure the pupil's good name and reputation, providing such statements are not made under circumstances justifying a privilege." (386:451). Teachers are privileged to make statements about students in the line of duty. Likewise, superintendents and board members are privileged to make statements about teachers in their line of duty (371:49). Statements by those not privileged are libelous or slanderous if they tend to impeach the character of a teacher, call him insane or incompetent (371:45). Monetary damages may be collected from or by teachers in cases of libel or slander.

Action obtainable by injured teachers—In states where there are tenure laws a teacher who has wrongfully been dismissed may not only recover his salary for the time in which he was not teaching, but may also force the school authorities to re-instate him at a salary based on the salary schedule (392:215). A teacher not under tenure may recover his salary for the term of his contract, minus any income which he may have earned during the term of the contract (392:209), (368:88). He may not, however, force his re-instatement, even for the term of his contract (392:214). Theoretically, the teacher who breaks his contract is liable for the monetary damage which such breach has caused (392:216).

Teacher-pupil relationship—The teacher is in *loco parentis* within the limits of his jurisdiction. This status may hold even outside of the school-room (388:13). He has the power and duty of reasonable and judicious corporal punishment (392:1, 3), unless forbidden by statute (392:4), (389:42).

CHAPTER XI

Teacher Tenure

THIS chapter reviews studies of teacher turnover, the experience of teachers, the causes and extent of turnover in local districts, and the effect of tenure legislation.

Turnover in the Profession

In a *Research Bulletin* of the National Education Association (402:144) published in 1924 there appeared a table indicating the number and percentage of teachers required to replace those leaving the profession in each state. The lowest percentage reported was 4.0, for Florida, and the highest was 47.0, for Wyoming. For the entire country the data indicated that 16.0 percent of the teaching staff needed to be replaced in one year. In the case of thirty-three of the states the percentage ranged from 10.0 to 20.0. Clarke (397:21) has shown by more exact data that these estimates were too high in the case of at least three states.

Taylor (406) presented data for Pennsylvania for the period from 1869 to 1922 on the yearly percentages of replacement. Ignoring a few irregular years, probably due to variation in the method of recording data, his figures show that the percentages varied from 6.1 to 14.5, with most of them grouped rather closely around 10.0. The median for the fifty-four year period was 10.9 percent and the mean 10.3 percent.

Wood (409) obtained data for a five year period from the Retirement Board of the State of Ohio on the teachers who actually left teaching in the state. For the five years from 1923-24 to 1927-28, the percentages of replacement were: 15.4, 16.6, 13.7, 13.8, 13.0.

Total Experience of Teachers in the Profession

Mean and median experience of teachers still in service—Clarke (397: 77-89) in 1926 summarized 112 service tables, all that were available at that time. No studies since that date have added materially to his findings. For the total group of tables he found that the median experience ranged from 1.43 years to 20.45 years, and the mean experience from 2.55 years to 20.55 years. With all teachers combined into one table, the median was 4.73 years, and the mean 8.14 years. This combined table included nearly 700,000 teachers.

The relationship between the median and the mean—Clarke (397) computed the relationship between the median experience and the mean experience as revealed by his service tables. He found that for a small chance grouping of teachers the mean is about 1.55 times the median, and for a large, inclusive table, the mean is about 1.70 times the median.

Total experience of teachers at the time of leaving the profession—Clarke (397) studied the table compiled by the Wisconsin Retirement Fund Board,

presenting data on the total length of service of women teachers up to the time of withdrawal from the profession. The withdrawal rates for the first five years were: 18.8 percent; 16.7 percent; 12.3 percent; 11.0 percent; 8.0 percent. The average length of service of women teachers in Wisconsin was found to be 8.41 years. By the end of five years 68.8 percent of the teachers had withdrawn; an additional 8.2 percent by the end of nine years; only an additional 3.6 percent from the 10th to the 24th years, inclusive; and 18.4 percent from the 25th to the 36th years, inclusive.

The variability of the data revealed by the service table—Clarke (397: 71-76) examined service tables for a number of states over a period of years. Finding that the fluctuations were very slight, he concluded that the use of a service table for one year as representing the average experience for the teachers of a state would be reasonably reliable.

Tenure and Turnover in the Local School System

Turnover in the local system—Elsbree (400) in 1928 reported the amount and rate of turnover in the cities and villages of New York. In the villages he found that the percentage of teachers who left ranged from 3.03 to 42.38; in the cities the range was from 1.37 to 33.59. The median for the cities was 11.03 percent, while for the villages it was 16.9 percent. White (408) reported data on this question for communities of various sizes in Iowa during 1922-24. He found that the rate of turnover for all cities was 29.1 for elementary teachers and 37.0 for high-school teachers. Seeder (404) reported the following percentages of turnover for Minnesota for 1924-25 and 1925-26: rural, 64.4; elementary, 25.7; secondary, 31.0; all teachers, 43.5. Allen (395) reporting on the high-school teachers of California in 1921-22 gave the following data: new teachers due to growth and expansion, 10.1 percent; to replacements, 13.0 percent; to "fluidity", 11.9 percent. The last two items, totaling 24.9 percent, would be comparable to the other data of this section.

The length of time teachers remain in the same system—Donovan (399) reported in 1925 the length of service in the same system for the elementary teachers in Kentucky. Out of 6671 teachers, 3000 were in their first year of local experience, and 1269 in their second. The median experience in the position was 2.26 years. Sharp (405) reporting on the rural teachers of the South found that in the one- and two-teacher schools 37.1 percent were in their first year, and 30.0 percent in their second year in the same school. In the larger schools, the percentages were 26.1 and 22.2, respectively. Waller (407) studying the teachers in Kentucky in 1927-28 reported that 22.30 percent were in the position for the first year, and 20.26 percent for the second year. The median length of time for such service was 3.55 years. Data indicated that conditions had improved since 1918-20, when the median was 2.52 years. Davis (398) in 1922 reported that of over 15,000 teachers in the high schools accredited by the North Central Association, 26.7 percent had occupied their present positions for less than 1 year; 35.8 percent

for less than three years; 16.5 percent for three years but less than five; 15.4 percent for more than five years but less than 15; 5.2 percent for from 15 to 30 years; and less than 0.5 percent for more than 30 years.

Reasons Why Teachers Leave Their Positions and the Profession

Reasons recorded by teachers and administrative officers—Sharp (405) in 1921 reported the reasons given by county superintendents for changes of positions in rural schools in the south: better salary, 34.6 percent; to be closer home, 25.6 percent; patrons didn't like him, 12.3 percent. According to the teachers, the most important reasons were: better salary, 25.4 percent; to be closer home, 15.6 percent; too many classes to teach, 6.6 percent. In the same study there were recorded the reasons causing 253 teachers to leave the rural schools. The most frequently mentioned were: to get into something more remunerative, 23.71 percent; to get married, 21.74 percent; to go into another county, 17.36 percent. Sharp also asked a group of 60 city teachers why they had left the rural schools. Each teacher checked all of the reasons which had any influence in his individual case: better salary, 81.6 percent; term was too short, 70.0 percent; too many classes to teach, 68.3 percent; little chance for self-improvement, 48.3 percent; to get into a larger school, 33.3 percent; poor equipment for the school, 33.3 percent; to get into graded school, 25.0 percent; to be closer home, 25.0 percent.

White (408) in 1925 studied the rate and causes of turnover of Iowa teachers. The most important reasons were, in order: quitting for a better position; quitting teaching profession; failure to make good; quitting for further training. Elsbree (400) in 1928 reported a comprehensive study of the teachers leaving their positions in the state of New York. The most important reasons were: to accept better position, 22.46 percent; to be married, 21.31 percent; dismissal, 10.34 percent. He reports that the percentage of avoidable turnover for the different cities of the state varied from .41 to 24.43, with a median of 6.06. For the villages the variation was from 0.0 to 30.0, with a median of 8.91. Waller (407) in 1929 reported that the most important reasons given by the teachers of Kentucky for leaving one school to go to another were: salary too small, 17.92 percent; to be closer home, 14.76 percent; to get into a larger school, 12.38 percent; little chance for promotion, 11.47 percent. Wood (409) in 1929 reported the official reasons given by teachers who had left the profession in Ohio during the period 1923-28. He found that 63.4 percent of the men and 19.1 percent of the women left for other work; 49.3 percent of the women left because of marriage. Lauthers (401) in 1926 summarized the data from a large number of surveys. He found that the following causes motivated teachers to leave their positions with greatest frequency: insufficient salary, marriage, unsatisfactory living conditions, dismissal.

Indirect factors related to tenure—Elsbree (400) in his study in 1928 of teachers in New York found that the amount of turnover varied with the

type of position. Thus for kindergarten teachers it was 12.13 percent; elementary, 9.37 percent; high school, 15.40 percent; special, 25.02 percent; principals, 5.76 percent; supervisors, 4.92 percent. When compared on the basis of grade, it was found that there was no regular variation. Among high school teachers the lowest rate, 9.91 percent was found for commercial teachers, and the highest, 17.13 percent, for science teachers. The study indicated that low turnover is to be expected in large communities and in systems employing a large proportion of local teachers.

Elsbree (400), White (408), and Wood (409) furnished data on the percentage of turnover in communities of various sizes. In each case it was found that the amount of turnover varied inversely, with more or less regularity, with the size of the community.

The Effect of Permanent Tenure Legislation

The National Education Association Committee on Tenure (403) reports that in a certain group of cities of over 100,000 population in states having tenure laws, 4.0 percent of the teachers left for some other occupation or profession; while in cities of similar size in states not having such laws, 6.0 percent. Almack (396) reports that in Portland, Oregon, the average term of service in the system was nearly 2.5 years greater under the permanent tenure law than before its passage. Elsbree (400) in his study of the State of New York found that the rate of avoidable turnover or the rate of dismissal was not significantly different between two groups of communities of comparable size, one group under the tenure law and the other group without such law.

Summary

The material presented in this chapter may be summarized as follows: The percentage of turnover in the profession is between ten and sixteen. The mean experience of teachers still in service is around eight years, and the median around five years. The average experience of those leaving the profession is about eight and a half years. More than two-thirds of the women teachers leave within five years; most of the remainder stay in the profession twenty-five years. Service tables do not vary greatly from year to year. There is a tremendous amount of variability in the reported turnover and tenure in the local system, determined largely by the size and type of community. From one-fourth to one-half of the teachers are new to their positions each year. The most important causes leading to change of position are: better position, better salary, and to teach nearer home. Among women the most important reason for leaving the profession is marriage; among men, to enter another line of work. There is some variation in rate of turnover due to type of position. Local turnover, separations from the profession, and avoidable turnover vary inversely with the size of the community. The evidence concerning the effect of permanent tenure legislation in increasing tenure is conflicting.

CHAPTER XII

Teachers' Organizations

RESEARCH attacks in the field of teachers' organizations are limited both in number and scope. The literature is characterized chiefly by hortatory articles, subjective evaluation, or descriptions of programs and practices in individual situations. Studies involving the collection and organization of data tend to be concerned with gross aspects of the problem, such as size, growth, and trends.

The first organized survey of the field was made by Alexander (410) in 1910. He described and appraised the activities of the National Education Association, some of the more important inter-state associations, practically all of the state associations, and associations in cities of 30,000 population and over. His investigation in 1910 showed conditions which may be briefly summarized as follows:

1. Teachers tended to differentiate freely into sections and independent bodies for specialized work. The tendency to form specialized bodies over increasingly large areas was growing rapidly. Cleavage along sex lines has increased since 1890.

2. Affiliation of associations was common in cities and the movement was spreading in states.

3. Differentiation and specialization had become exaggerated since 1900.

4. Differentiation and specialization appeared to be inevitable and on the whole highly desirable.

5. City and state associations especially were interested in legislation.

6. City associations were the most aggressive in 1910. The customary procedure when seeking legislation was to investigate conditions and legislation in similar areas, formulate the proposed legislation, appoint a committee to influence legislators, and organize publicity campaigns to influence the public.

7. City associations were working for the economic betterment of teachers, while state associations were concerned with the betterment of schools and raising the standards in the profession.

8. In 1910 the city associations were more successful in influencing legislation than the state associations.

9. Lack of permanent organization, of a constant personnel, and of institutional schemes of representation caused the associations to exert small influence on legislation.

10. The associations were tending more and more to promote legislation.

11. The movement for economic betterment was spreading from city to state associations. In 1910 the National Education Association was doing little with economic problems.

12. Attempts to give temporary aid had largely given way to attempts to secure permanent relief through adequate salary schedules, tenure, and pensions.

13. Weak and ineffective appeals were being superceded by aggressive campaigns.

14. There was no conclusive evidence that teachers by their efforts in the field of economic betterment were lowering the tone of the profession. Labor unionism among teachers in the United States was a negligible factor so far as its practical significance was concerned.

15. Women members, although comprising the great majority, were almost non-entities, except in cities.

16. The causes of this state of affairs was largely tradition, the assignment of important positions to persons occupying certain places in education work, and the lack of interest shown by women.

17. Women, especially in cities, were leading an aggressive movement to obtain greater representation and to form separate associations of women.

18. Greater prominence of women in associations seemed to be inevitable and on the whole highly desirable.

Ruediger (424), in 1911 made a study of teachers' institutes, summer schools, teachers' meetings, reading circles, associations, and a number of other agencies. Teachers' associations were characterized as "voluntary" and the state laws pertaining to their organization and attendance are cited. No details are given on the various associations. Mention is made of the Federation of State Teachers' Associations, established in 1909, and extracts of the constitution are cited. He states that this Federation reaches teachers in the main only indirectly. State associations are given little space. The state educational conferences and their important effect on shaping educational policies are treated briefly. County and sectional meetings are considered to be the agencies which reach the rank and file of teachers, the opportunity for teachers to mingle in such meetings being stressed.

Granrud (415) concerned himself with state teachers' associations, their functions, objectives, organization, methods, and activities. He reports a membership increase of from 65,793 in 1907 to 436,392 in 1923 and points out that the growth in scope and size of the activities has been comparable. His points may be briefly summarized as follows:

1. Clearly defined objectives are necessary if the work of the associations is to prosper.
2. Control must be centralized in a few members. The actual executive work should be done by one man with the necessary assistants.
3. Associations should determine the fields in which they can render the greatest service and then plan specific steps toward the realization of the improvement.
4. Problems of peculiar interest to teachers should be attacked first, (such as tenure and salaries) and later the state-wide and nation-wide educational problems should be attacked.
5. When the specific ways in which the association may function have been decided upon, every resource of the association must be employed to successfully forward these plans. More publicity should be obtained through journals and addresses at meetings. When the educational program has been advanced as much as possible, the officers may seek ways and means for entertaining the teachers, for increasing their knowledge about tests, junior high schools, and the like.

In 1928 Steele (425), using the constitutions and by-laws of forty-five state associations including the amendments adopted between the years 1923 and 1928, and the minutes of the South Dakota Education Association since its organization, arrived at the following conclusions:

1. Twenty-one constitutions of state teachers' associations contain by-laws.
2. The major topics of these by-laws are:
 - a. Committees and their duties
 - b. Disposal of convention addresses

- c. Establishment of departments
- d. Membership fees
- e. Nomination and election
- f. Official publications
- g. Rules of procedure
- h. Time and place of meeting.
- 3. Amendments to the constitution:
 - a. Amendments must usually be announced a stated time in advance of final action
 - b. More than a majority of those present and voting are usually required for approval
- 4. By-laws of these constitutions are usually considered under less restriction than are amendments.
- 5. Reports from forty associations show the following recent trends in procedure:
 - a. Abandonment of the mass type of legislative organization for the representative (of local or divisional associations) type
 - b. Employment of a full-time paid secretary
 - c. Publication of an association magazine
- 6. The South Dakota Education Association has attempted to change its constitution in twenty-eight of its forty-three annual meetings.
- 7. The major issue was the time and place of meeting, which was raised at least twelve times.
- 8. This association has followed the trends indicated in (5) above.

Criticisms and comments on the form of constitutions, omissions, and revision are made.

Hosman (416), in collaboration with a number of secretaries of state associations, published a handbook on state teachers' associations which summarized objectives, activities, procedures, and methods of organization. A section is devoted to the official journal, and a score card of twelve items with their relative weights is printed in the appendix. A series of standards for the office of executive secretary, as set up by the committee, follows:

- 1. *Qualifications*: high type of professional attitude; proper academic training; experience in teaching, in editorial work, and in executive work.
- 2. *Duties*: to record the proceedings of the association; register the names of members; keep proper accounts; collect and care for fees and moneys; draw vouchers on the treasury when signed by the president; carry on investigations of conditions affecting the welfare of teachers and schools; publish proceedings of the annual association meeting; edit the official organ; act as general manager of the association; and perform such other duties as pertain to his office.
- 3. *Salary*: sufficient to enable him to live upon a scale befitting his place in society. Suitable increments should be accorded from year to year.
- 4. *Tenure*: two years on probation and after that on a continuing contract which may be terminated only by a majority vote of the appointing body.
- 5. *Retirement*: after twenty-five years of service and upon reaching the age of sixty-five years on one-half his average salary for the past five years.
- 6. *Official relations*: impartial and neutral.

Data on the growth of teachers' associations have been compiled from time to time in the *Journal* of the National Education Association (419 to 423). Figures are generally given for all of the states, for Alaska, the Philippines, and Hawaii. The relative ranking of the various associations, their respective memberships, the data on the same associations for previous

years, serve as indices to the growth of such associations. Boone (413) presents a little data on growth but is concerned chiefly with the history which he considers briefly. Martin (418) sets forth several tried plans for effective enrolment of members in teachers' associations.

Goodrich (414) compiled data on the financing of state teachers' associations, giving the percentage of teachers enrolled in each state association, the dues paid, salaries of full-time secretaries, and the percent of income from dues used for the salaries of secretaries and staff.

Winn confined herself to the activities of local associations and in several investigations (429, 430, 431) studied the loan and relief funds, mutual benefit services, and lecture and entertainment courses, as activities of a number of city associations of teachers.¹ Cleveland, Grand Rapids, Kalamazoo, Kansas City, and Seattle were reported as having loan and relief funds from which teachers might borrow, some of these being created by assessments and others by voluntary contributions. A number of mutual benefit plans are in operation and provide out of funds created by dues paid, hospital rooms or cash benefits of from \$2.00 to \$8.00 per day. The lecture and entertainment courses are sometimes open to the public and create a community of interest between teachers and patrons. University credit for some of the lecture courses is given to teachers attending. Blaisdell (412) urged the development of the social side of education association activities. Receptions, teas, dances, stunt parties, roller skating parties, and what not are among the activities suggested and practiced in many places of meeting.

Data on membership totals, yearly subscription, publication, addresses, and in some cases the purpose of education associations in the British Isles, and of the World Federation of Education Associations, were published in the *Journal of Education* (London, England) for March, 1929 (417). The Office of Education (426, 427, 428) furnishes directories of international associations, and foundations of national, sectional, state, and some city associations in the United States. The Reports of the *Proceedings* of the annual conventions of the American Federation of Teachers (411) state the resolutions, give the names of committees and membership, the names and addresses of officers, and set forth in full the reports and addresses given at the meetings of the federation.

¹ A recent study of the activities of local teachers' associations has been made by the Division of Research of the National Education Association. Data will be available in the 1931 Yearbook of the Department of Classroom Teachers, National Education Association, May, 1931.

CHAPTER XIII

Pensions or Retired Pay for Teachers

PENSIONS or old age annuities are a comparatively recent development in the United States. Within the past thirty years many proposals have been made and a number of them adopted providing for pension systems for teachers, clergymen, and others. Mistakes have been numerous, and continuous study of the provisions for annuities must be made. Widespread interest in these problems seems to be particularly evident at the present time and a number of investigations have been made recently or are in progress.

Investigations by the sub-committee on pensions of the Committee on Salaries, Tenure, and Pensions of the Public School Teachers in the United States in 1905 (449) revealed the fact that "hardly a beginning" had been made toward creating pension systems for teachers in the United States. That Committee did report laws in Massachusetts, New York, New Jersey, Ohio, Illinois, and California, however, which bore on the question, and also, very briefly described a number of city systems. Studensky (458) in 1920 made a critical and descriptive study of the history, problems, benefits, financing, and management of teachers' retirement systems, going into some detail regarding the systems in operation in the several states and in a number of cities, and furnished copies of the chief laws and of actuarial tables. He reports that nearly all of the systems were financially unsound at that time, but that the significance of pension systems for teachers was being realized more and more, and that reorganization was being effected in some. He found the minimum years of service required to entitle one to a pension ranged from twenty to thirty-five in states, and from ten to forty in cities, with from none at all to twenty years of service outside of the state or system credited. Maximum pensions ranged from \$250 in Maine to \$1000 in Philadelphia and Massachusetts, one-half the salary in New Jersey, and the minimum ranged from nothing to \$500. Disability benefits were allowed in most of the systems but only after from two to twenty years of service which had to be in most cases within the jurisdiction of the retiring system. The amounts of these benefits ranged from 6.25 percent of the salary plus \$50 to 60 percent of the salary plus \$250 per year. Death benefits ranged from none to all of the contributions with interest; dismissal benefits from none to all of the contributions with interest; and resignation benefits from none to all of the contributions with interest. The necessity for trained and experienced actuaries in determining costs is stressed and the inadequacy of contributions in existing systems is pointed out. He concludes that the wholly contributory systems and the non-contributory systems were impractical but that the joint contributory systems were feasible and proper. Systems found to be unsound financially were those which operated on a cash dis-

bursement basis with no surplus, those using revenues not determined by pension needs, those fixing rates not determined by pension needs, and those making the amounts of contributions discretionary (by the government). The necessity for considering age (at entrance and retirement), sex, and salary when devising a pension system was pointed out and the view that certain minimum obligations should be compulsory while contributions above the minimum should be optional was considered highly desirable. At the time of writing only the Massachusetts system, the New York system, Pennsylvania system, and the newer (1919) systems of New Jersey, Ohio, and Vermont were based upon actuarial estimates of future liabilities. Many systems provided no reserves, the government assuming the responsibility for paying pensions as they matured; all of these systems committed the grave error of underestimating the growth of obligations. In most systems a reserve was provided but very inadequately, being made up entirely so many times of the "left overs" of the annual receipts. Of twenty-four systems studied, seventeen were of this type. Descriptions are given of these various systems in some detail, as well as of the scientific pension laws of 1919 in New Jersey, Ohio, and Vermont.

Almack and Lang (432) set forth in their book in 1925 some of the general problems of pension systems for teachers, giving several examples from various states and objections to them. A *Research Bulletin* of the National Education Association for May, 1924 (448) made a statement of the fundamental principles of teachers' retirement systems as follows: (a) beginners to be exempt up to a certain age, probably twenty-five years; (b) teachers leaving the service should be able to draw all of their own deposits at that time, and the deposits of the public only upon reaching the retirement age; (c) adequate disability benefits should be provided for every disabled teacher regardless of the amount in his account; (d) retirement ages and rules should be so defined and administered as to retain teachers during efficient service and provide for their reasonably comfortable retirement when their services are no longer satisfactory; (e) sums accumulated in the accounts of teachers and unused portions of the accounts of retired teachers should be paid to designated beneficiaries or to the estates of such teachers; (f) the annuity board should have an individual account with each teacher; (g) teachers' rights under old systems should be safeguarded when changing the system of annuities; (h) upon the adoption of a retirement plan where none has existed, teachers should be given credit for their entire period of service and the funds therefor provided by the public; (i) sums deposited by the teachers and by the public should be approximately equal; (j) deposits should be required regularly, and concurrent with the period of service; (k) the deposit to be made should be fixed in the act creating the system of retirement. Reasons for the enactment of retirement legislation and for the interest of teachers were stated with explanations. In June, 1924, there were twenty-two state-wide retirement systems, nine states in which cities could establish such systems, and seventeen states with

no teacher-retirement laws. In fourteen states having state-wide systems there were increases in total income of retirement funds between 1922 and 1923 in every instance but one and in every case the payments to teachers increased. The total expenditures varied from \$1131 to \$784,468 in 1922 and from \$1393 to \$900,301 in 1923. A later volume of the same bulletin published in May, 1926, gives similar data and includes also the provisions of eleven systems of teacher retirement, controversial issues on teacher retirement, and the text of the Vermont retirement law. A brief inquiry blank requesting that the person mark *yes* or *no* depending upon his acceptance or rejection of each of the eleven principles named in the earlier bulletin above, sent to 109 individuals concerned with education and retirement systems, brought the replies shown in Table 7:

TABLE 7. PERCENT OF 109 EXPERTS ACCEPTING CERTAIN PRINCIPLES OF RETIREMENT SYSTEMS

Principle	Percent Accepting
1	2
Beginners to be exempt	54
Deposits returned in case of early retirement	72
Disability provided for	94
Guarantees to both teachers and public	95
Death benefits included	83
Individual accounts kept	92
Rights under previous systems safeguarded	95
Credit for past service allowed	95
Costs shared by teachers and public	95
Service and deposits concurrent	95
Amount of deposits fixed	96

Cubberley (438) discusses the stages in the development of the idea of teacher retirement and sets forth the advantages and principles of retirement plans in his text on state school administration. Ekern (439) states that more than \$250,000,000 were held in assets by the state and city retirement systems for teachers in 1928, almost all of which was accumulated in the previous ten years and nearly all of it held in the nine states of Connecticut, Indiana, Massachusetts, Minnesota, New Jersey, New York, Ohio, Pennsylvania, and Wisconsin. He points out that the real purpose of retirement systems for teachers is to benefit the schools through retirement of over-aged teachers on pensions. Two parts are necessary to a permanently adequate plan, namely (a) an individual credit or fund held in trust for each teacher, and (b) a contingent fund provided by the public. Pyrtle (452) sets forth the objectives of the Committee on Retirement Allowances of the National Education Association and reports twenty-three states as having state-wide teacher retirement systems in 1929. She also reports briefly the legislation during the year previous in a number of states and territories to modify the existing systems or provide for new systems.

The *Research Bulletin* of the Research Division of the National Education Association for November, 1930, is concerned with the principles and status of state and local systems and with the legislation on the problems of teacher retirement (444). Four more principles are added to the ones named above in the bulletin for May, 1924, these being: (a) periodic actuarial investigations should be made to insure financial soundness; (b) provision should be made for cooperative or reciprocal relations between the retirement systems of the different states; (c) the administration should be in the hands of a retirement board whose make-up is carefully prescribed in the retirement law, and who represents both the public and the teachers; (d) the teachers should have the option of electing the manner in which they will receive the benefits of the accumulated value of their deposits and the state's payments. The status of teacher retirement legislation in twenty states is reported and a retirement plan for staffs of state education associations is urged. Sixteen issues of teacher retirement are discussed both as to theory and practice. Rietz (453) notes the early development of the pension system in Europe, the attitude which should be developed toward retirement systems, and discusses six chief features of future plans for employees. The findings of the Bureau of Labor Statistics for 1927 are given in *The Monthly Labor Review* for July, 1928 (457). The report covers state-wide and a number of city retirement systems, presenting data on establishment, membership, management, support, and benefits of such plans.

The Carnegie Foundation in its *Twenty-third Annual Report* (435) states the fundamental principles of teachers' retirement systems¹ as follows:

1. Membership shall be optional for those teaching previous to the enactment of the retirement law but shall be compulsory for new teachers.
2. Retirement rules should provide for the retention of efficient teachers and the retirement of them when old age or disability makes satisfactory service no longer possible. The allowance should be large enough to enable the retiring teacher to live in comfort.
3. The contributions of the teachers and of the public should be approximately equal.
4. The amounts to be paid by the teacher and by the public should be stated in the organic act creating the retirement system.
5. Teacher's and state's contributions should be made regularly and concurrently during the period of service.
6. Individual account for each teacher to be kept.
7. Retirement system to be on a sound reserve basis.
8. Periodic actuarial investigations to be made of the system.
9. A retirement allowance should be made for disability after a reasonable period of service.
10. Teacher's accumulated deposits should be returnable upon withdrawal or death prior to retirement.
11. The teacher should be allowed to elect the manner in which he will receive the benefits.

¹ Taken from 1928 Report by Dr. John K. Norton before the joint meeting of the National Council of Teacher Retirement Systems and the Committee of 100 on Teacher Retirement Allowances of the National Education Association.

12. Credit should be allowed for service prior to the enactment of retirement legislation.

13. The teacher's rights under previous retirement systems should be guaranteed when the system is altered.

14. Provision for reciprocal or cooperative relations between states should be made with reference to retirement systems for teachers.

15. The retirement board should be representative.

16. The personnel of retirement boards should be prescribed to assure a high type of representation for both public and teachers.

Failure to mention mortality tables and neglect of a rate of interest to be agreed upon at the beginning of contributions and guaranteed by the state, are the only serious deficiencies of this list according to this report. Brief comments on a number of retirement systems are made.

The *Twenty-second Annual Report* of the Carnegie Foundation (436) points out sources of the speculative element in pensions as follows:

1. Haste in the inauguration of plans.
2. Inferior actuarial service.
3. Legislation and rulings passed in the interests of a few rather than for the general welfare.

The data underlying a sound state-wide teachers' retirement system were set forth as follows:

1. Name.
2. Sex.
3. Date of birth.
4. Place of birth.
5. Teaching experience. Where? When?
6. Present salary. Per month? Per year?
7. Present position. Rural, village, city? County? School District Number? Grade?

The steps looking to the establishment of the system are:

1. Organize committees to study the literature of the subject and to discover the needs of the state.
2. Frame the general provisions of a proposed retirement plan.
3. Collect the statistical data and study and interpret them. (The kinds of tables to be built up are listed with reference to examples of them.)

The activities of the states were discussed briefly. Connecticut teachers withdrew chiefly in 1924 and 1926 for the reasons of marriage, leaving the state, and entering another profession, according to data reported. The pension and insurance plan of the Massachusetts Institute of Technology is described as "one of the most defective which has ever been adopted or proposed by any institution" for the reasons following:

1. Fails to differentiate clearly between the role of the insurance policy and the annuity contract.
2. It offers a form of insurance adapted to industrial groups but ill-suited to the teacher.
3. The teacher loses the payments if he leaves the employ of the institution.

4. It follows the *ignis fatuus* of the total disability pension into uncertainties of which the teacher has little information.

5. The plan loses sight of those hazards of life against which the teacher needs most protection.

The *Proceedings* of the Carnegie Foundation for February, 1928, the *Twenty-fourth Annual Report* of the President and of the Treasurer of that foundation (434), and the more recent bulletin by Pritchett (451) are concerned particularly with the social and economic phases of teacher retirement. The economic considerations may be listed as follows:

1. The primary justification for the expenditure of money by a government, a university, a church, or a corporation in the inauguration and maintenance of a system of retirement lies in the advancement of the true interests of the service for which the government, university, church, or corporation exists. No pension system based on charity can be defended.

2. The cost of annuities to be paid without the accumulation of reserves is so excessive that it cannot be borne except by the government.

3. The only feasible way of building up reserves is through annual or monthly payments throughout the term of service.

4. Whatever machinery is adopted, it will be necessary to establish a cooperation between the employer on the one hand and members of the group to be provided with annuities on the other.

5. The cooperating employer shall provide a part of the payment to the reserve.

6. Payments by an employer are in time absorbed (as they should be) into the salary scale of the members and they will therefore provide their own retired pay.

7. The reserves accumulated must be dedicated exclusively to the purchase of annuities for the beneficiary or his dependents.

Following are the social considerations:

1. Professional men of high intellectual and moral standards need to preserve not only their economic independence and self-respect, but also their individual freedom of action.

2. Pension system providing an old age annuity without cost are demoralizing in any group of men.

3. Requirement of the entire service within a certain jurisdiction before benefits will accrue cannot be defended.

4. Unless a reasonable proportion of the active pay is forthcoming at retirement the system will break down.

5. Reasonable foresight and self-denial on the part of participants is necessary to independence in old age and no system can protect the man who spends all he makes all the time.

The *Twenty-fourth Annual Report* (434) lists the more common weaknesses of isolated college retirement systems as follows:

1. Require teaching in the same institution during the whole period of service.

2. The contracts are rather insecure.

3. The pensions are limited regardless of the payments made.

4. The provisions for total disability retirement are inadequate.

5. Disability insurance coverage is allowed only before retirement for age or before age sixty.

6. A withdrawing member receives his principal with interest but nothing of the payments by the institution.

The more northerly states are reported as fairly well committed to the notion of state-wide teacher retirement systems while the more southerly states are not. No state-wide systems are at present ideal but they are difficult to change. A recent survey showed in state-wide systems:

1. A decrease in teachers on administrative boards.
2. The joint-contributory system well established.
3. The vanishing of uncertain sources such as gifts and the public's contributions raised through taxation.
4. Actuarial service at the outset of the plan and at intervals.
5. That accrued liabilities are still giving concern to the teachers and the public.
6. Compulsory membership for new teachers and optional membership for present teachers.
7. The percentage basis for the teacher's contribution at a fixed level throughout the period of service, in common practice.
8. Restriction of the public's contribution, but not of the teacher's.
9. Amounts of retiring allowance increased, but not yet satisfactory.
10. Refunds more generous and extensive.
11. Disability provisions somewhat more generous.

Shaw (456) concerned himself with the retirement plan in Pennsylvania. His findings may be summarized as follows:

1. The minimum age may be lowered from sixty-two to sixty or even fifty-eight years, provided it is clearly understood that those who retire early will receive a considerably lower allowance and may even assist in eliminating those who are unfit at an earlier age.
2. The Pennsylvania system is the only system requiring forty years of service before eligibility to retirement allowances.
3. Pennsylvania allows no credit for "outside service" (outside of state) whereas many other retirement systems do.
4. Forfeiture provisions in Pennsylvania are not so strict as in some other states but some states provide for no forfeiture for absence.
5. No state except Pennsylvania indicated that credit for service was not allowed beyond the age of sixty-two.
6. Recent increases in salary tend to encourage those who have become unfit to remain in service longer to get the benefits under the Pennsylvania statute.
7. Replies to a questionnaire indicated disapproval of the Pennsylvania method of using salary to determine the retirement allowance. (The minimum provided in some states is only a partial remedy for this.)
8. The maximum salary of \$2,000 used in calculating the retirement allowance is disapproved of by retired employees, special students in the field, and the trend of practice in other states. The recently revised or established systems of New York, Wisconsin, Vermont, and New Jersey have no such limit. This restriction was stricken out in 1925.
9. Pennsylvania considers the following factors in determining the retirement allowance: sex, age at retirement, average salary for past ten years of service, length of service in the public schools of Pennsylvania.

10. Certain factors tend to retain the unfit in service, namely:

- a. The minimum age limit of sixty-two years.
- b. The requirement of forty years of years of service to be eligible for half-salary.
- c. No provision for "outside credit".
- d. The determination of "final salary" combined with recent salary increase.
- e. Forfeitures in cases of extended absence. (Partially corrected in 1925.)
- f. No salary above \$2,000 counted in determining final salary.

11. Certain factors are not so attractive to employees as others recommended by experts and practical in other states, namely:

- a. Minimum age limit of sixty-two in comparison with fifty to sixty years elsewhere.
- b. Requirement of forty years of service as compared with thirty years for eligibility in other states.
- c. No credit for "outside credit" as compared with a median of ten years elsewhere.
- d. "Final salary" determined on basis of last ten years of service as compared with last five years in certain other states or with the basis of accumulations recommended by the Carnegie Foundation.

12. Data show that those who have retired were not highly educated.

13. The retirement allowance provided for in Pennsylvania is inadequate in that it falls below the subsistence level. No minimum or maximum allowance is provided.

14. Retired employees have very little income other than retirement allowances. The chief reasons for this are (according to the employees):

- a. Number of dependents
- b. Small salaries
- c. Education of children

15. A large number of retired employees are more or less dependent upon relatives or friends for support.

16. The median amount indicated by the retired employees as necessary to provide minimum needs was \$632.

17. Approximately half of the retired employees were married and about 80 percent of those married were men. The number of dependents was small.

18. Only about 20 percent of the retired employees received any education beyond the eighth grade.

19. Many retired employees engaged in other work after retirement and many have been unable to get work.

20. Pennsylvania does not provide adequately for those dependent upon the retired employees.

21. Retired employees favor the following amendments:

- a. Removal of the \$1,000 maximum annuity limit. (Corrected in 1925.)
- b. Granting of credit for service after age sixty-two. (Corrected in 1925.)
- c. Credit for some "outside service".

- d. Credit for all service regardless of continuity. (Partially corrected in 1925.)
- e. A minimum or some equivalent to offset the low salaries of the rural districts and the decreased purchasing power of money.

Savage and Cogswell (455) studied teacher retirement in the state of Colorado and set up a plan for a system of state-wide teachers' pensioning. The plan is presented in outline form and the details and principles explained elsewhere in the bulletin. Actuarial and financial data are presented in fourteen tables and explained in the text in detail.

Krusen (443) explains the proposed Colorado plan of teacher retirement basing her conclusions on the recommendations of the Research Division of the National Education Association and the United States Bureau of Education and calling attention to the fact that the Colorado plan satisfies the criteria.

Hobbs (442) traced the history of the teachers' annuity movement in Iowa from its beginning to the present (1926) calling attention to the legislation, and the activities of committees. The content of a bill proposed for passage in 1923 is outlined.

Furst, Mattocks, and Savage (441) studied the problem of teacher retirement in Virginia and constructed a plan for that state which embodied the provisions considered most desirable, this plan being presented in outline form with explanations following the outline.

Anderson (433) reported the history briefly and the status of the Nevada plan of teacher retirement. The report (written by Mrs. C. H. Luke, ex-officio Executive Secretary of the Public School Teachers' Retirement Salary Fund Board) states that thirty teachers had been placed on the retirement list since the system was put in operation (1915) and, of this number, seventeen were retired because of superannuation and thirteen because of disability.

Carr (437) reported a questionnaire study on the attitude of teachers toward the flat-rate and step-rate plans of financing a teacher retirement system, the study being made in California. Replies from over 4,000 teachers favored the flat-rate plan over the step-rate plan by two to one and almost one-half of the teachers favored less than \$20 as the annual payment.

Palmer (450) analyzed teachers' pension systems in the United States for tendencies, and criteria for evaluating pension systems. Her data cover the years from 1894 to 1924. A summary of the tendencies reported follow:

1. Development of state-wide teachers' pension systems.
2. Retention of teacher representation in the administration of pension systems, but a decrease in its extent.
3. Establishment of partly contributory rather than free or wholly contributory pension systems.
4. Support of teachers' pension systems by both public and private funds.
5. Disappearance of such uncertain sources of funds as gifts and legacies.
6. Provision for raising by taxation the funds required to meet the public's obligations to the system.
7. Adoption of the actuarial reserve plan of financing.
8. Provision for subsequent actuarial investigation.

9. Adoption of special provisions for meeting the problem of accrued liabilities.
10. Optional membership in the pension system for those teachers in service at the time of the establishment of the system, accompanied by a time limit for the exercising of their choice.
11. Compulsory membership in the pension system for new entrants.
12. Increase in the amount of the assessment against the teacher's salary.
13. Assessment of a fixed percentage of teacher's salary with no relation to length of service.
14. Abandonment of limits and special requirements with respect to the teacher's contribution.
15. Discontinuance of the policy of pooling teachers' contributions and the substitution thereof of individual accounts.
16. Increase in the amount of retirement allowance and provision for two distinct sums, and annuity purchased from the teachers' contributions and a pension from the city or state, payable according to the option of the teacher.
17. Retirement of teachers, regardless of sex, upon a basis of thirty years of service, a portion of which must have been rendered within the pensioning city or state.
18. Provision for disability benefits upon a decreased service requirement and without the requirement of a medical examination.
19. Granting of more generous and extensive refunds. Questions (fourteen in number) based upon the present trends as listed herewith, were presented as criteria, the idea being to consider a pension system adequate which would provide grounds for answering in the affirmative considering the trends above as proper ones.

A *Research Bulletin* of the National Education Association for March, 1930, (445) prints a checklist of twelve items with space for comments on teacher retirement systems. No ratings are given but the questions are to be answered merely with *yes* or *no*. The bulletin (446) for May, 1930, explains the items called for on this list. The list follows:

1. Is there a state-wide teacher retirement system?
2. Is membership required of new teachers?
3. Do both teachers and public contribute to the support of the retirement system?
4. Is the method of determining the total amounts to be deposited in the retirement fund by teachers and the payments to be made by the public fixed by law?
5. Is the retirement system organized on the reserve basis so that the moneys necessary to meet all obligations will be regularly accumulated without the necessity of recurring legislation?
6. If teachers leave prior to retirement, may they withdraw their deposits?
7. If teachers die prior to retirement is the sum of their deposits payable to their heirs or estate?
8. Is an age for compulsory retirement fixed?
9. Is a periodic actuarial investigation of the retirement system provided?
10. Is provision made for retirement for disability?
11. Are public funds used to pay for prior service benefits?
12. Is provision made for cooperative or reciprocal relations with other sound teacher retirement systems?

Furst and Kandel (440) reported on the social philosophy of pensions and listed the following as fundamental principles of pensions:

1. The function of a pension system is to secure to the individual who participates in it protection against the risk of dependence due to old age or to disability.
2. The obligation to secure this protection rests first upon the individual.
3. Men on salaries or wages are, in the economic sense, employees. There is a moral

obligation and a financial obligation on the part of the employer to cooperate in sustaining a pension system.

4. A pension system should rest upon the cooperation of employers and employees.

5. Teachers' pensions should be stipendiary in character, amounting to a fair proportion of the active pay.

6. In actuarial terms a pension is a deferred annuity upon the life of one or more individuals, payable upon the fulfillment of certain conditions.

7. In order that the annuity may be assured to the individual, one condition is indispensable—there must be set aside, year by year, the reserve necessary with its accumulations, to provide the annuity at the age agreed upon.

8. The only pension system whose cost can be accurately estimated in advance is one conducted upon the actuarial basis of setting aside, year by year, the necessary reserve.

9. Annual or monthly instalments is the most practical method which can be devised for purchasing a deferred annuity, provided the payments begin early in the employee's career, and provided that the contributions receive the benefit of the current interest for safe investments.

10. A pension system should apply to a group whose members live under comparable financial and economic conditions.

Furst and Kandel (440) report the lack of scientific bases for pension systems in the United States, the methods of administration, the amounts of pensions, the service and age retirements, disability allowances, financing, and financial unsoundness of present systems (1918). Summaries of the New York City Commission Reports, the Report of the Illinois Commission, and the plans in Massachusetts and in Pennsylvania are given with a detailed report on the (then) proposed Vermont plan. A tabular statement of teachers' pension systems is presented and the study of sixty-seven plans summarized.

Ryan and King (454) in one of the earlier studies of pension systems, summarized the extent of the teachers' pension movement. They reported thirty-three states having systems of pensions for public school teachers (1916); of these twenty-one were state-wide, five affected two or more cities in the state, and seven applied to a single city or county. Twenty-one states had contributory systems, eight states had non-contributory systems financed by the public entirely, and five provided no contribution from the public. Massachusetts was the only state which refunded all payments by the teacher, with interest, in case of death or resignation. Indiana was reported as paying back the actual amount paid in without interest, and Utah as refunding the full amount at death. Nine states refunded half of the contributions in case of death or resignation, Illinois allowed the return of half the amount if the teacher resigned before completing fifteen years of service. Kentucky provided for a refund of three-fourths of the contributions in case of death or resignation, and five states provided for the return of the full amounts contributed in case of dismissal, Virginia adding interest at six percent. In Delaware the return of contributions was optional with the board of retirement. The texts of the Massachusetts, Minnesota, and New Hampshire laws are reproduced and a general discussion of teachers' pension plans is included.

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